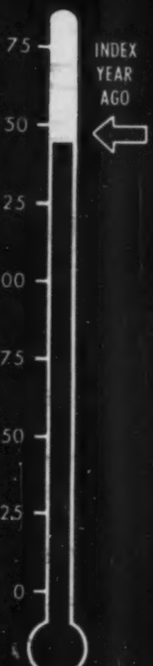
BUSINESS WEEK

Capital Spending Plans Still Solid

PAGE 41



The NEW Shortage of Brainpower

Special Report (page 176)

A McGRAW-HILL PUBLICATION

APRIL 27, 1957

National's De luxe adding machine . . .

Live keyboard* with keytouch adjustable to each operator!

Saves up to 50% hand motion—and effort! Never before have so many time-and-effort-saving features been placed on an adding machine.

Every key operates the motor—so you can now forget the motor bar. No more back-and-forth hand motion from keys to motor bar.

Keys are instantly adjustable to each operator's touch! No wonder operators are so enthusiastic about it. They do their work faster with up to 50% less effort.

New operating advantages, quietness, beauty!

"Live" Keyboard with Adjustable Key-touch plus 8 other time-saving features combined only on the National Adding Machine: Automatic Clear Signal . . . Subtractions in red . . . Automatic Credit Balance in red . . . Automatic space-up of tape when total prints . . . Large Answer Dials . . . Easy-touch Key Action . . . Full-Visible Keyboard with Automatic Ciphers . . . Rugged-Duty Construction.

A National Adding Machine pays for itself with the time-and-effort it saves, then continues savings as yearly profit. One hour a day saved with this new National will, in the average office, repay 100% a year on the investment. See a demonstration, today, on your own work.

Find Your National office or Dealer in the 'Yellow Pages'

National

ADDING MACHINES • CASH REGISTERS
ACCOUNTING MACHINES

THE NATIONAL CASH REGISTER COMPANY, DAYTON 9, OHIO
989 OFFICES IN 94 COUNTRIES

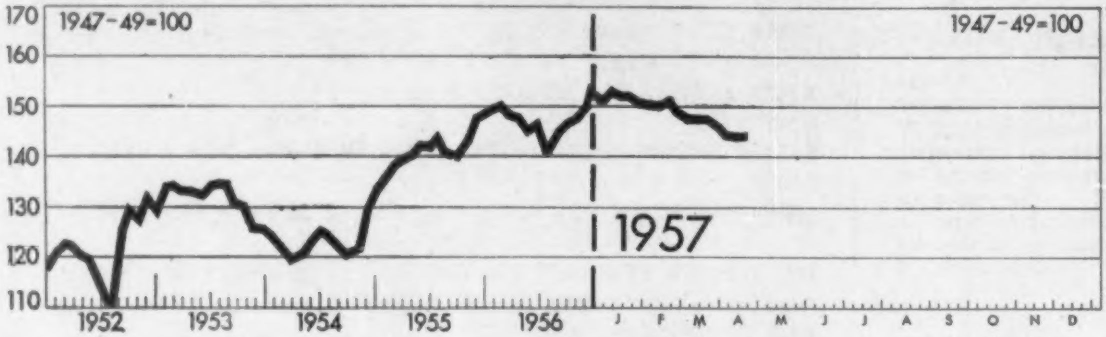
IN BUSINESS THIS WEEK April 27, 1957

GENERAL BUSINESS

THE DEPARTMENTS

BUSINESS WEEK is published weekly by McGraw-Hill Publishing Co., Inc., at 99 N. Broadway, Albany 1, N. Y. Entered as second class matter Dec. 4, 1936 at the Post Office at Albany, N. Y. under act of Mar. 3, 1879. Subscriptions $6 a year in U. S. A.
NUMBER 1443

FIGURES OF THE WEEK



	1946 Average	Year Ago	Month Ago	Week Ago	§ Latest Week
BUSINESS WEEK INDEX (chart)	91.6	148.8	148.2	144.7	*144.9
PRODUCTION					
Steel ingot (thous. of tons)	1,281	2,473	2,364	2,313	2,310
Automobiles and trucks	62,880	167,530	172,710	160,370	151,866
Engineering const. awards (Eng. News-Rec. 4-wk daily av. in thous.)	$17,083	$77,863	$61,149	$57,478	$60,838
Electric power (millions of kilowatt-hours)	4,238	10,894	11,723	11,695	11,485
Crude oil and condensate (daily av., thous. of bbls.)	4,751	7,130	7,818	7,442	7,551
Bituminous coal (daily av., thous. of tons)	1,745	1,656	1,704	1,600	1,650
Paperboard (tons)	167,269	281,098	288,866	284,442	282,574
TRADE					
Carloadings: miscellaneous and l.c.l. (daily av., thous. of cars)	82	74	69	67	67
Carloadings: all others (daily av., thous. of cars)	53	50	46	44	45
Department store sales index (1947-49 = 100, not seasonally adjusted)	90	114	107	113	107
Business failures (Dun & Bradstreet, number)	22	252	318	308	302
PRICES					
Spot commodities, daily index (Moody's, Dec. 31, 1931 = 100)	311.9	424.3	410.1	407.1	407.6
Industrial raw materials, daily index (BLS, 1947-49 = 100)	††73.2	99.4	94.3	93.3	93.6
Foodstuffs, daily index (BLS, 1947-49 = 100)	††75.4	82.1	81.1	83.0	82.6
Print cloth (spot and nearby, yd.)	17.5¢	19.4¢	17.9¢	17.9¢	17.9¢
Finished steel, index (BLS, 1947-49 = 100)	††76.4	157.1	174.0	174.0	174.0
Scrap steel composite (Iron Age, ton)	$20.27	$55.50	$45.83	$42.17	$42.17
Copper (electrolytic, delivered price, E & MJ, lb.)	14.045¢	46.230¢	31.780¢	31.925¢	31.915¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.)	$1.97	$2.32	$2.32	$2.28	$2.37
Cotton, daily price (middling, 1 in., 14 designated markets, lb.)	**30.56¢	36.30¢	30.86¢	33.87¢	33.88¢
Wool tops (Boston, lb.)	$1.51	$1.73	$2.14	$2.10	$2.10
FINANCE					
500 stocks composite, price index (S&P's, 1941-43 = 10)	17.08	47.47	44.01	45.01	45.57
Medium grade corporate bond yield (Baa issues, Moody's)	3.05%	3.72%	4.42%	4.43%	4.45%
Prime commercial paper, 4 to 6 months, N. Y. City (prevailing rate)	¾-1%	3¼%	3⅝%	3⅝%	3⅝%
BANKING (Millions of Dollars)					
Demand deposits adjusted, reporting member banks	††45,820	56,713	55,704	†55,588	56,588
Total loans and investments, reporting member banks	††71,916	85,487	86,747	†86,930	87,268
Commercial and agricultural loans, reporting member banks	††9,299	27,770	31,579	†31,376	31,547
U. S. gov't guaranteed obligations held, reporting member banks	††49,879	27,695	25,990	†26,305	26,258
Total federal reserve credit outstanding	23,888	25,497	25,158	25,400	25,520

MONTHLY FIGURES OF THE WEEK

		1946 Average	Year Ago	Month Ago	Latest Month
Cost of living (U. S. Dept of Labor BLS, 1947-49 = 100)	**March**	83.4	114.7	118.7	118.9
Imports (in millions)	**February**	$412	$1,051	$1,118	$992

** Preliminary, week ended April 20, 1957.*
† Revised.
†† Estimate.
*** Ten designated markets, middling 15/16 in.*
§ Date for 'Latest Week' on each series on request.

THE PICTURES—Hans Basken—94; Birdair Structures, Inc.—105 (bot. 2); Boeing Airplane Co.—80 (bot.); Bob Briggs—138; Grant Compton—46 (bot.); Delta Engineering Corp.—106 (bot.); Food Machinery & Chemical Corp.—79; Humble Oil & Refining Co.—144; International Basic Economy Corp.—122, 123; Herb Kratovil—136 (bot.); Marshall Lockman—80 (top), 81, 82; McGraw-Hill World News—106 (top); Missouri-Kansas-Texas Railroad Co.—136 (top); Motor Vehicles Research, Inc.—105 (top); Gene Pyle—48; Mike Shea—92, 93; Steel Products Co.—140, 141; Joan Sydlow—46 (top 2), 47; Ubiratan de Lemos—129; United Nations—135.

Spittin' Kittens

If you like your kittens on the quiet side, better keep them away from raw horsemeat. One owner tried this seemingly placid platter and wound up with a couple of fighting tigers.

When these "spittin' kittens" were featured in a recent issue of PARADE, they stopped eight out of ten readers—who stayed to get the whole story.

Making people stop, read—and remember—is something PARADE does so well (and so often) that it's now one of the best read magazines in print.

As an advertiser in PARADE you get twice as many readers for your dollar as in any of the three biggest weekday magazines.

Food for thought: To move merchandise, to make new customers, to get reorders . . . PARADE has what it takes.

PARADE . . . THE SUNDAY MAGAZINE SECTION OF 55 FINE NEWSPAPERS COVERING SOME 2600 MARKETS . . . WITH MORE THAN 15 MILLION READERS EVERY WEEK

B U S I N E S S   W E E K

BUSINESS WEEK • APRIL 27, 1957 • NUMBER 1443

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POSTMASTER . . . Please send form 3579 to Business Week, 330 W. 42nd Street, N. Y. 36, N. Y.

READERS REPORT

Tough on the Chef

Dear Sir:

. . . Unless I misjudged the American businessman, I think you may find difficulty in locating an executive "who likes to cook the chef at Bookbinder's" [BW—Apr. 6'57,p170]. Some of us may be tough, but we are not cannibals. Perhaps you just ran out of commas. I am making a donation of a few as follows: , , , , , , , , , , , ,

CHESTER C. CONNER

NEW KENSINGTON, PA.

A Helping Hand

Dear Sir:

We have read with much interest President J. Thomas Smith's problem of selecting a new name for the Detroit Harvester Co. [BW—Apr.6'57,p182]. While we cannot rename his firm we can give him a formula that worked for us.

Choose as a starting point the factor or factors which all your products have in common. This might be a material, plant location, process technique, or perhaps a specific property in common with all your products. Abbreviate those factors most important to you and combine them to form a new name. . . . Keep your name short, make it easy to pronounce and to remember, but make it free of unpleasant connotation. Make it different, but be certain it tells your product story. . . .

RICHARD P. KAHN

PRESIDENT, DECORATIVE PLASTICS DIVISION
BO MYTE CO.
SILVERDALE, PA.

Dear Sir:

Re: Detroit Harvester's name calling. They are in Detroit. Their business is metalworking. How about Detroit Metalworking Co.

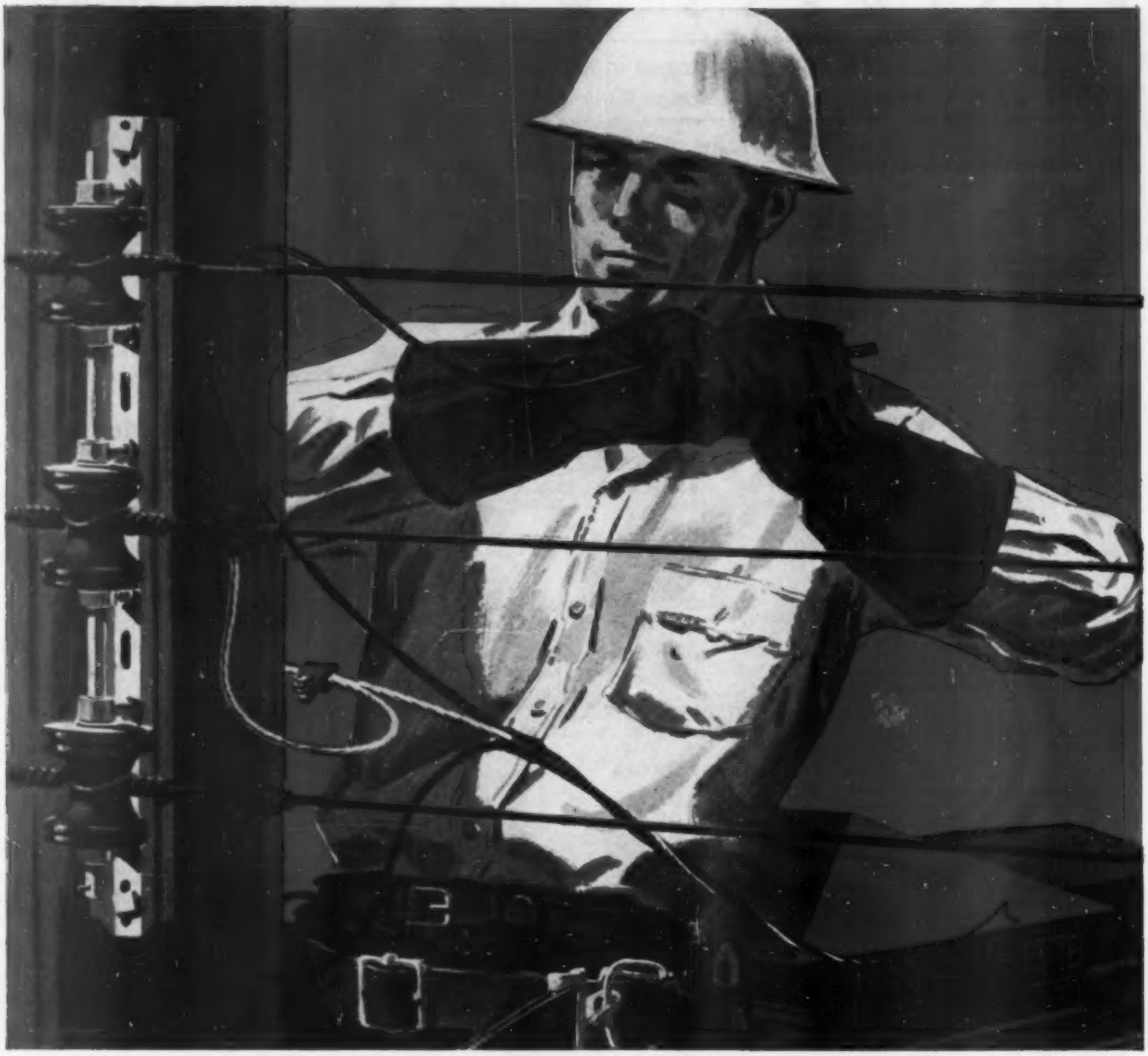
HOWES BODFISH

ALUMINUM COMPANY OF AMERICA
BALTIMORE, MD.

Last Line of Defense

Dear Sir:

The legend that loan sharks have been eliminated by commercial lenders' competition once contained much truth, but the situation is changing. Commercial lenders' costs have risen, and they don't like to make small loans any more. Consumer finance companies no longer call themselves small loan companies; and the percentage



Triplex — combining three wires in one compact assembly — makes possible neater services, fewer attachments, easier installations — for big savings.

ACSR that can meet or exceed your toughest requirements. Put Kaiser Aluminum's growing leadership in extra high-voltage research to work for you today!

Power Cable that eliminated 26 competitive cables in time periods of from zero to 2,509 hours of a High Ozone Attack test — then went on to 6,000 hours.

Weatherproof — One of the nation's leaders in covered conductor, Kaiser Aluminum supplies the finest distribution, secondary and service cable in the field.

AAAC, developed and introduced by Kaiser Aluminum! Gives greater strength in high conductivity and is stronger than All Aluminum Conductor.

of their loan volume in the $5 to $50 range has shrunk from something like 20% in 1940 to about 2% today. They can't afford to compete with loan sharks, even at rates of 2% to 3% per month.

Hence, contrary to the impression given by your article [BW—Apr.6'57,p84], credit unions are now almost the only defense left against loan sharks. Usury laws have never helped. . . .

RICHARD Y. GILES
MADISON, WISC.

Super Census

Dear Sir:

Began reading BUSINESS WEEK during early thirties but don't recall an editorial that seems more important than that about the new Federal Statistic Users Conference [BW—Mar.30'57,p204].

A periodic (even monthly) super social economic census of the nation is essential now. Perhaps it can be done by unifying and coordinating the statistical work of the Commerce Dept., Central Statistical Agency, major current private polls and data collectors with that of the FRBS—supplemented by new data technique where feasible. . . .

J. E. HANZLIK
RESEDA, CALIF.

Remarkable Growth

Dear Sir:

Congratulations on the good coverage of Broadway-Hale Stores, Inc. [BW—Mar.30'57,p110].

The growth and activities of Edward W. Carter and the Broadway-Hale stores is truly remarkable—an indication both of business trends in the nation and especially in the West. . . .

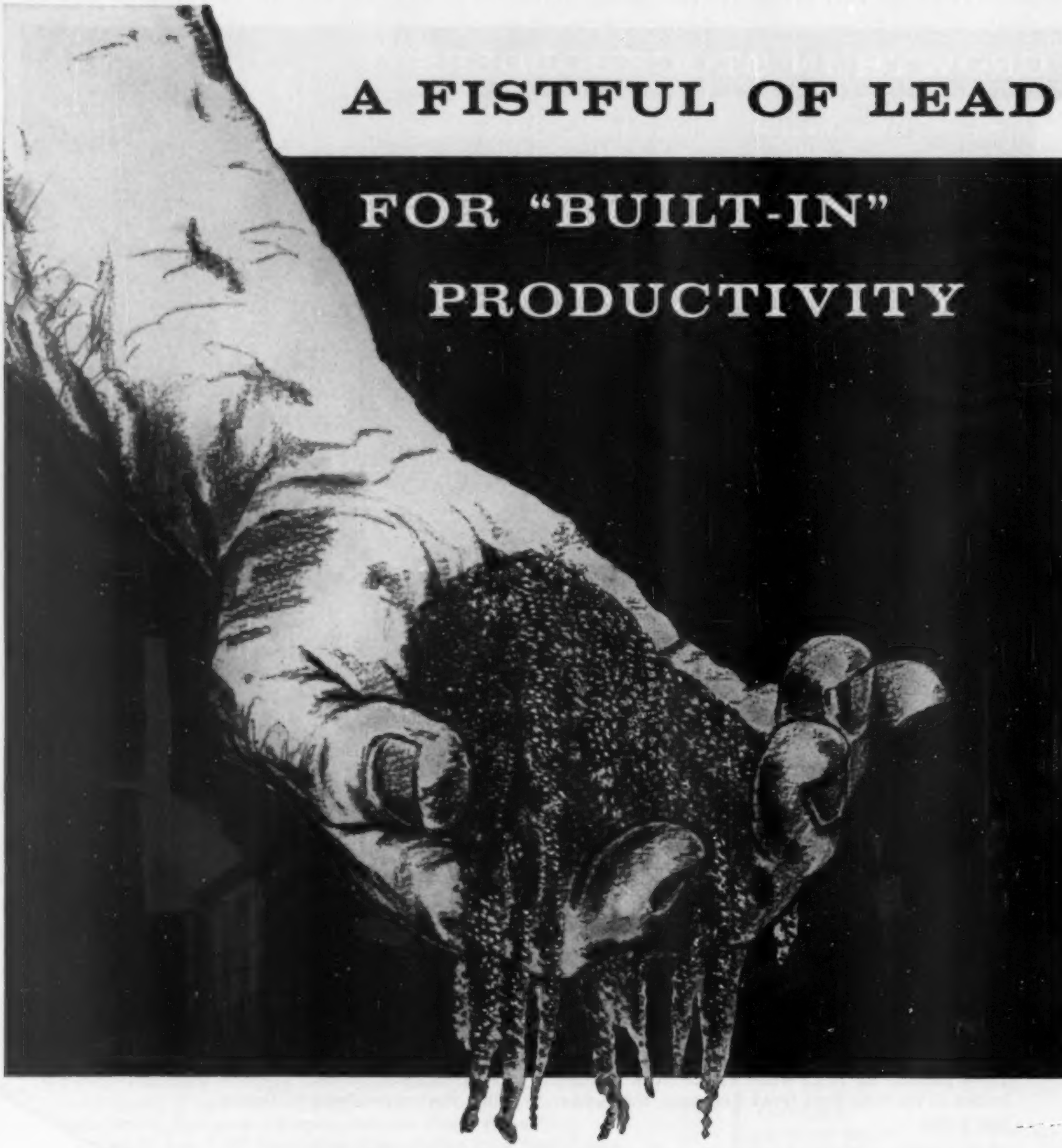
WELTON BECKET
PRESIDENT
WELTON BECKET AND ASSOCIATES, ARCHITECTS-ENGINEERS
LOS ANGELES, CALIF.

Outside Looking In

Dear Sir:

As an ex-General Motors dealer, I found your susceptibility to and furtherance of General Motors' big benevolent brother campaign in The Auto Market at Midstream [BW—Mar.2'57,p25] a sickening manifestation of the axiom "the rich get richer" which GM is doing through immense and fantastic programs designed to cultivate public favor.

W. C. HOFFMAN
CRAWFORD, NEB.



Controlled additions of lead, introduced when the ingots are teemed, produce steel with vastly superior machining qualities compared to same steel unleaded. Leaded alloy and carbon are freer machining, permit faster feeds and speeds and greatly increase tool life. They cut clean and with a fine finish which frequently eliminates the final machining operation. These better machining qualities add up to a kind of "built-in" productivity that can mean substantial production line savings for you.

If you would like to see for yourself what "built-in" productivity can mean in your operation, ask us to lead half of your next Aristoloy order. Our field metallurgist is also at your disposal—ready to work with you in selecting the best leaded grade for the job.

For complete information, call the Copperweld office in your nearest major city, or write direct.

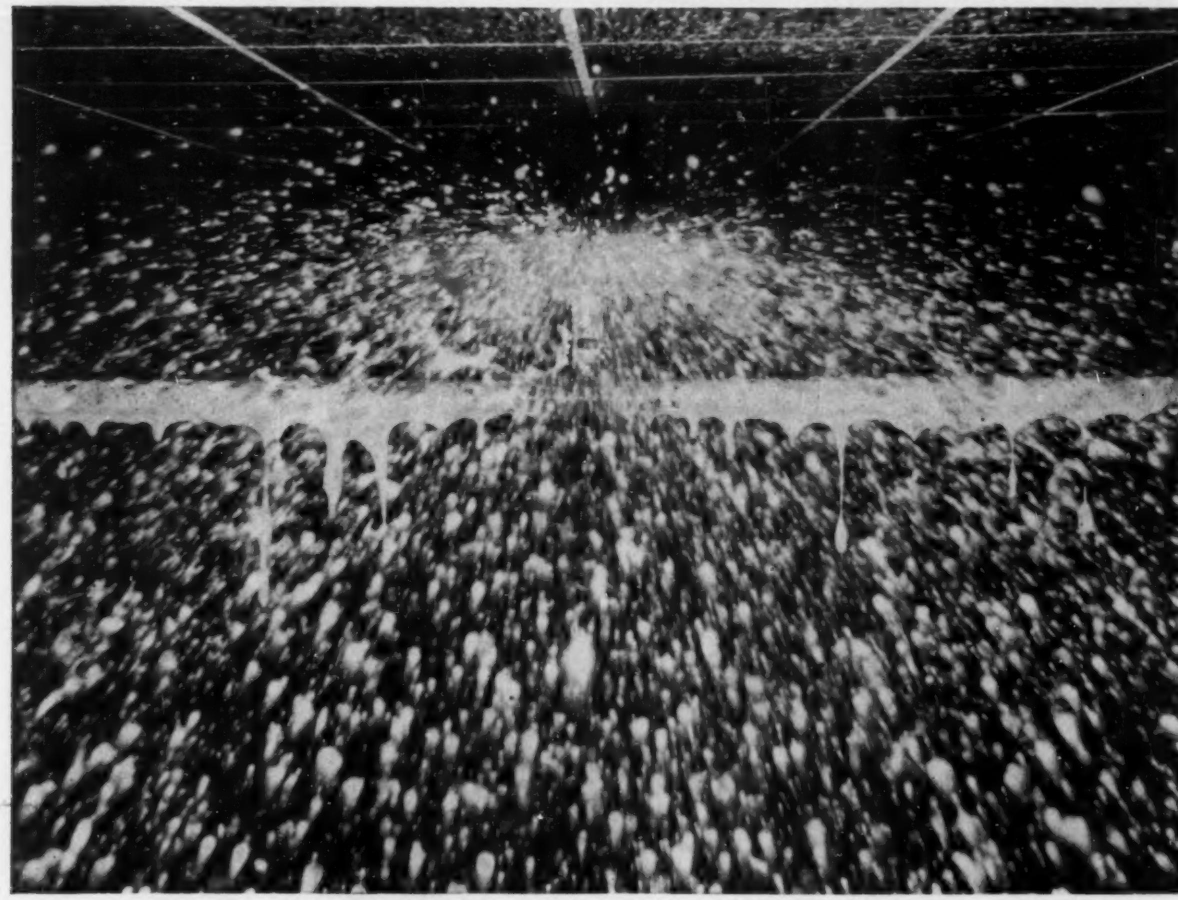
ARISTOLOY STEELS

COPPERWELD STEEL COMPANY

Steel Division • Warren, Ohio

EXPORT: Copperweld Steel International Co., 225 Broadway, New York 7, N.Y.

"Automatic" FOAM-WATER SPRINKLERS provide DOUBLE FIRE PROTECTION for Chemical Plants



A THICK BLANKET OF FOAM TO SMOTHER SPILL FIRES OF FLAMMABLE LIQUIDS —THEN A DELUGE OF WATER TO PREVENT DAMAGE FROM "TORCH" FIRES

AIRFOAM is generally recognized as the most effective means of extinguishing fast-spreading fires resulting from leaks or spills of flammable liquids. Foam nozzles, mixing air with a solution of water and foaming agent, produce a dense blanket of closely knit foam that smothers the fire by cutting off oxygen.

"Automatic" Sprinkler now combines AIRFOAM with WATER in a single system in which the same nozzles or sprinkler heads first discharge a large volume of thick foam that quickly extinguishes spill fires, then spray a deluge of water over the entire area to prevent fires above floor level from spreading or causing damage to structure of equipment.

The System automatically changes from FOAM to WATER when foam-producing material is exhausted, or may be changed manually before that time by shutting off foam liquid supply. Or, a blanket of foam may be laid at any time over a flammable liquid spill as a fire precaution. The foam blanket maintains its fire-smothering consistency under the deluge of water for 20 to 30 minutes.

Existing sprinkler systems may be modified to use FOAM-WATER sprinklers without involving re-design of piping.

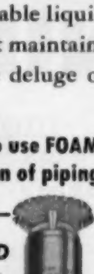
"Automatic" Sprinkler

"AUTOMATIC" SPRINKLER CORPORATION OF AMERICA

Dept. "B", YOUNGSTOWN 1, OHIO

OFFICES IN PRINCIPAL CITIES OF NORTH AND SOUTH AMERICA

NEWLY DESIGNED
"Automatic" FOAM-WATER sprinklers are now available for either upright or pendent installation.



Aircraft makers use

NIBROC® TOWELS

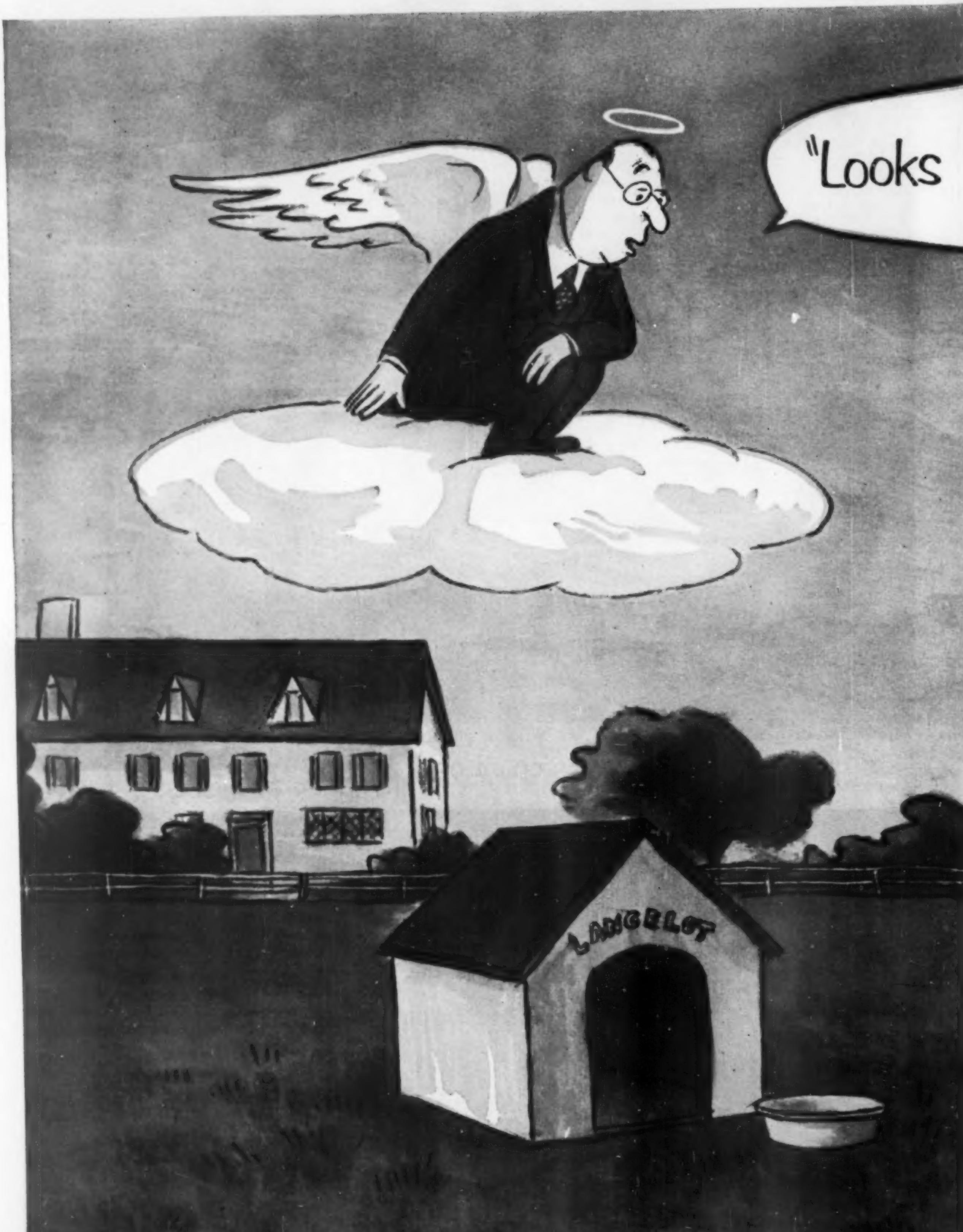
more than any other paper towel

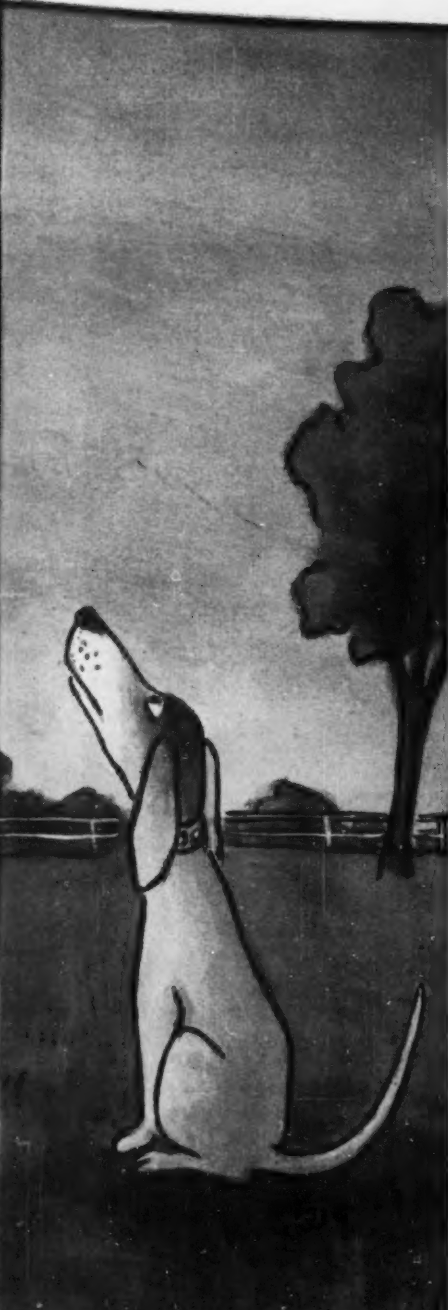
And the *new* Nibroc towels are the best ever—stronger, yet soft and absorb water in a flash. Such a velvety touch, they're a pleasure to use even on your face. In white they're the whitest yet—product of an exclusive "white magic" bleaching process. In the natural shade, too, Nibroc towels are vastly improved by new manufacturing techniques.

First and now more than ever the finest wet strength towel, Nibroc is used more by industry and institutions than any paper towel. You can save, too, by buying Sofwite® and Softan® tissues. Ask your dealer how Nibroc can reduce towel costs. He's listed under Paper Towels in the Yellow Pages. Or write Dept. ND-4, Brown Company, 150 Causeway St., Boston 14, Mass.

Other NIBROC Quality Products: INDUSTRIAL WIPERS • WINDSHIELD WIPERS • KOWTOWLS • WALL, FLOOR and RECESSED CABINETS

Odhner


"Looks
LANCELOT



like things have gone to the dogs, Lancelot!"

Lancelot: I'm afraid so, boss.

Man: But why?

Lancelot: Don't you know?

Man: All I know is I left the family a mighty prosperous business.

Lancelot: Boss, remember when you and I walked over to the office of that insurance man? The one from Equitable?

Man: Oh, my goodness!

Lancelot: And boss, do you remember what he said about that new kind of Equitable business insurance?

Man: Oh my!

Lancelot: How, between you and the lawyer and this policy, we'd have enough money to pay inheritance taxes without having to sell the business?
You said you'd call him the next day.

Man: Oh!

Lancelot: We had to sell the business—and at a big loss, at that—to get the money to pay those taxes.

Man: What can I do to make things right, Lancelot?

Lancelot: It's what you *could* have done, boss.

Man: Call the Man from Equitable?

Lancelot: It would have made all the difference.

Living Insurance for Business by Equitable

X-5

FREE BOOKLET

Equitable Life Assurance Society of the U.S.
393 Seventh Avenue, New York 1, New York—Room 1807
Please send me Equitable's new booklet which explains how *Living Insurance* can help solve many common business and tax problems.

NAME..........
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CITY..........
STATE.......... ZONE

No more pounding, punching or jamming . . .

ELECTRIC STAPLING IS HERE!

NEW "*Swingline®* 66" staples neatly, accurately, speedily . . .

CUTS OFFICE COST TWO WAYS! The new electric "SWINGLINE 66" slashes labor costs . . . saves on staples, too. Operators work more efficiently without fatigue for the "SWINGLINE 66" does 99% of the work. Just the *Feather Touch* of a finger tip staples up to 40 pages together *electrically* . . . a perfect clinch every time. And SWINGLINE's exclusive "open channel" means easy loading of up to 210 staples at once. Why not ask your stationery supplier for a free 10-day trial?

including Rubber Gasket at stationers everywhere. (Foot pedal model available at $35.75)

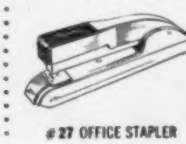
For full information write:

Swingline® INC. LONG ISLAND CITY 1, NEW YORK

World's largest manufacturers of staplers for home and office

#4 OFFICE STAPLER

Tot "50" POCKET STAPLER

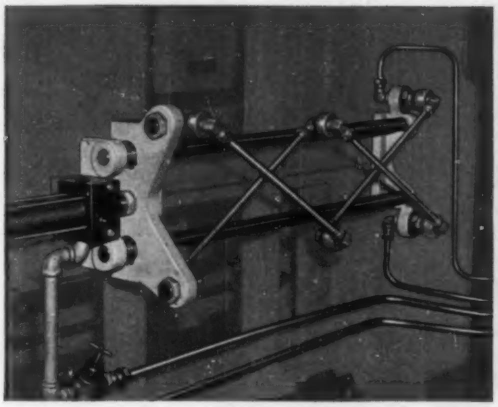


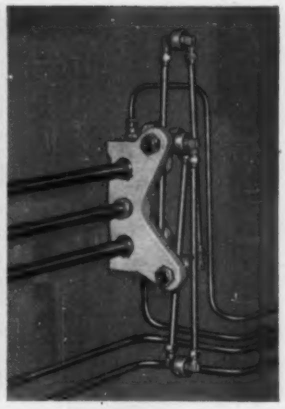
#27 OFFICE STAPLER

*Slightly higher in the West

IN EQUIPMENT DESIGN ■

CHIKSAN SWIVEL JOINTS SMOOTH OUT KNOTTY LINE PROBLEMS

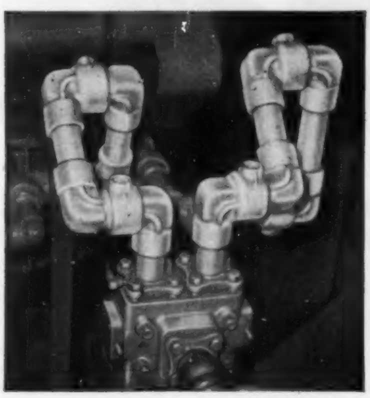




STEEL LINES FOLD LIKE AN ACCORDION

Connected to a moving head, these compact swivel jointed all-metal hydraulic lines flex and fold like an accordion on this automatic bottle unpacking machine.

When a machine's moving parts cause tight bend or twist on hose lines, Chiksan Swivel Joints provide a ready solution. When design dictates the use of metal lines, Chiksan Swivel Joints allow rubber-like flexibility. In fact, wherever line flexibility is required, designers and maintenance engineers know it's just good business to call on Chiksan. Precision made Chiksan Swivel Joints with their infinite service life, full 360° rotation and high safety factor, quickly pay for themselves by minimizing hose replacement and eliminating costly line failure, fluid loss and downtime. If your equipment hose lines require frequent replacement due to torsion or bend radii fatigue, or if flexible all metal lines are in order, contact Chiksan. A nearby representative will call, analyze your requirements, and make specific recommendations. Write today for his name.

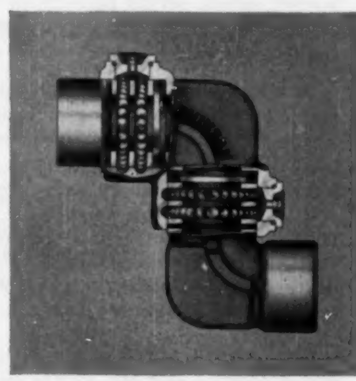


NO HOSE BURST HERE

These Chiksan swivel jointed steel lines on a die casting machine eliminate damaging hose ruptures, reduce fire hazard, fluid loss and setup time by 75%.

NO BEND FATIGUE HERE

This highly specialized lens grinder utilizes Chiksan Swivel Joints to eliminate tight hose bend as the multiposition head is shifted from one grinding position to another.



LOOK INSIDE A SWIVEL JOINT

Detailed attention to detail. Precision machining and specific packing seals for specific services. These are the quality-plus features built into every Chiksan Swivel Joint.

CHIKSAN

A SUBSIDIARY OF FOOD MACHINERY AND CHEMICAL CORPORATION

Please address: Dept. 265

CHIKSAN COMPANY—BREA, CALIFORNIA • CHICAGO 5, ILLINOIS • NEWARK 2, NEW JERSEY

Well Equipment Mfg. Corp. (Division), Houston 1, Texas • Subsidiaries: Chiksan Export Company • Chiksan of Canada, Ltd.

How DETECTO Scales help solve industry's problems

DETECTO sustains accuracy despite terrific beating!

Bulk packing area where battery of Detecto Scales facilitate work in shipping department.

Handles SHOCK LOADS in General American Transportation's PARKER-KALON PLANT without losing *mathematical* precision

Finished screws in transit to shipping department. Detecto Printer provides printed weight records that eliminate human errors.

The Parker-Kalon division of General American Transportation Corp., originators of famous PK Self-tapping Screws, inflicts severe punishment on a battery of DETECTO Scales that would ruin many ordinary scales.

In a highly modern operation that requires precision weighing at various stages of production, heavy tote pans of self-tapping and socket screws, screw nails and masonry nails, wing nuts and thumb screws are weighed on DETECTO Scales in rapid succession. A bear for endurance, DETECTO delivers hair-line accuracy day after day in around-the-clock shifts.

"We have a tradition of top quality in our own products," said Mr. Eli Ogulnick, General Manager, "and we insist on top quality in our factory equipment. We are happy that DETECTO fulfills our very difficult requirements."

Detecto's shock absorbing construction handles load after load of work in process swiftly, efficiently and accurately.

3 Exclusives help solve difficult weighing problems

1. Exclusive all-steel construction and all-steel lever system assure longer, trouble-free scale life and less maintenance cost.
2. Unique Outboard bearing design prevents platform tipping, gives completely accurate weighing on any part of the scale.
3. Detecto's tare and weigh beams extend the dial capacity 125% — providing greater gross weighing with minimum dial graduations.

DETECTO makes scales for every industrial need, ranging from 1/100 oz. to 50 tons. Scales for receiving, production, packaging, shipping, inventory, counting, batching, blending, printing, manual, semi-automatic and fully automatic models. Write for free catalogue. Our engineers are available for your free consultation.

Fine Scales

DETECTO SCALES

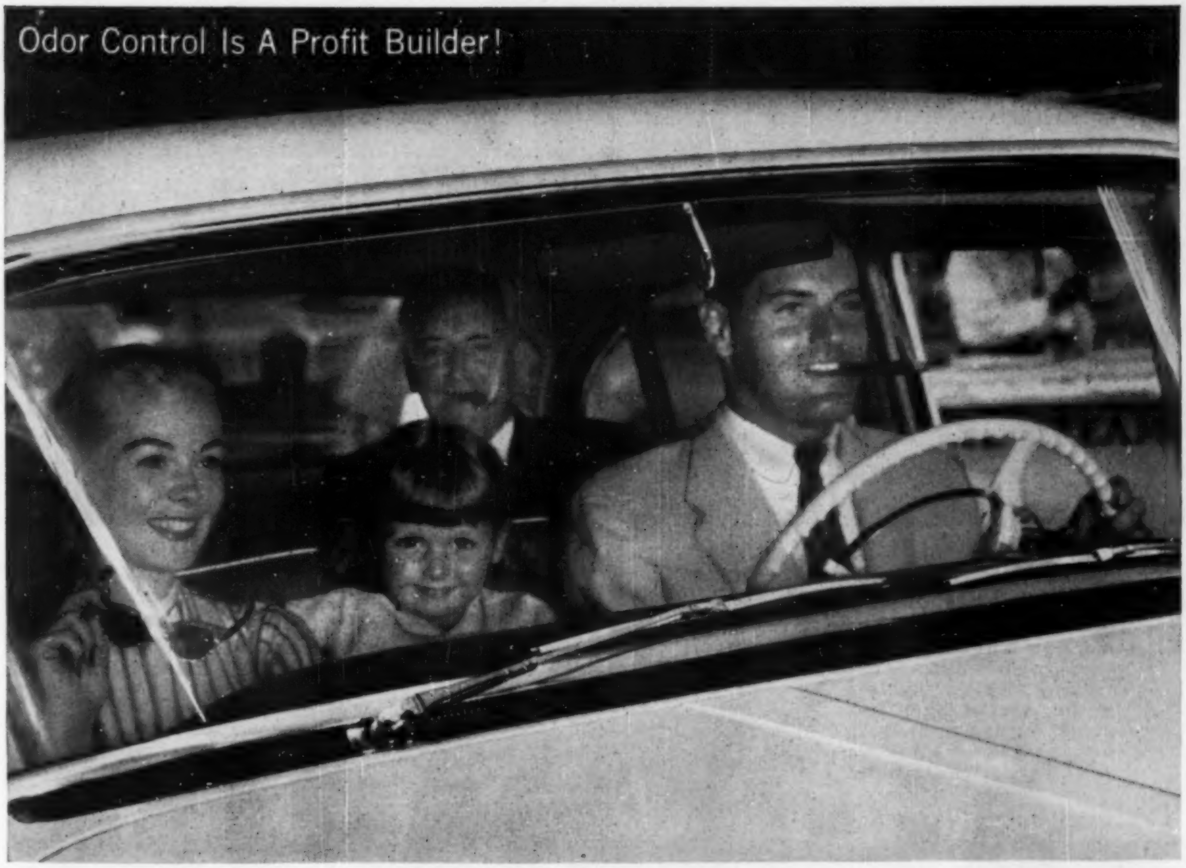
Since 1900

DETECTO

SALES and SERVICE in all principal cities.

Detecto Scales, Inc.
515 Park Avenue, Brooklyn 5, N. Y.
Please send me catalog #651 describing DETECTO precision industrial scales. This, of course, obligates me in no way.

Name..
COMPANY..
Street..
City.............................Zone..........State..........



What's New in Automobile Air Conditioning?

Engineers discovered that despite the finest automobile air conditioning and carefully designed interiors, passengers were not satisfied with results. There were complaints of "proximity odors". . . the effects of smoke, closeness and confinement which cause irritability, discomfort and, frequently, even sleepiness.

One of the recognized effects of poor air quality is the reduction of driver efficiency and alertness. To meet this safety problem Airkem Odor Control experts were consulted. The Airkem answer was simple and low in cost.

A variation of basic Airkem equipment used in institutional air conditioning was evolved. The unit was installed in the air stream to vaporize Airkem Odor Control compounds into the air of the automobile. No other changes in the air conditioning equipment were required. The odors were neutralized and complaints stopped. According to qualified observers even major structural changes could not have duplicated the results of the Airkem installation.

Airkem has a long record of success in eliminating complaints arising from stale air in offices, theatres and occupied areas—wherever people meet indoors. Other applications of Airkem formulae include treatment of industrial wastes, hospitals and smoke damage. Good housekeeping for factories and institutions requires Airkem specialized service. Wherever problems may arise due to the discomfort of "proximity odors" alert management has turned to Airkem for assistance.

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Company________________

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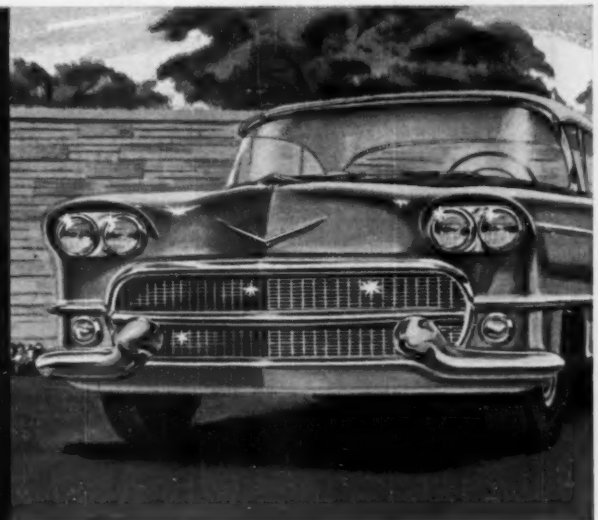


PROBLEM: Make appliances better looking, more serviceable.

SOLUTION: Aluminum provides longer life, better performance and appearance for appliances. There's more buy-appeal and longer service in trim, shelves, trays and other exposed parts of bright, colorful, anodized aluminum. And it can't rust, does not corrode, tarnish or chip.

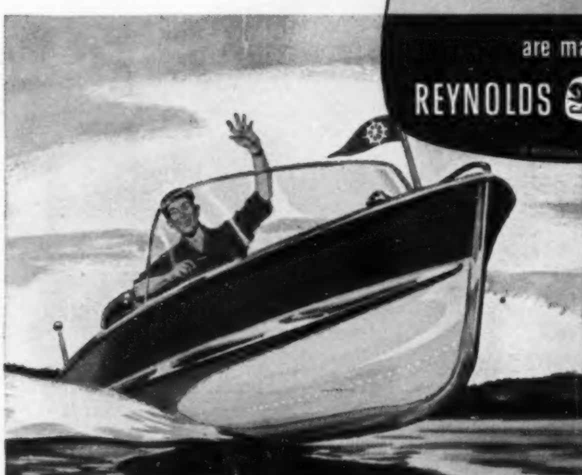
PROBLEM: Find new ways to increase auto sales appeal.

SOLUTION: Anodized aluminum has the "look of sterling" or "gleam of gold" that gives automobile grilles and trim parts a different new beauty. It can't pit, tarnish or rust. And because colorful, anodized aluminum finishes are in the metal they reduce manufacturer's costs.

The Finest Products Made with Aluminum

are made with

REYNOLDS ALUMINUM



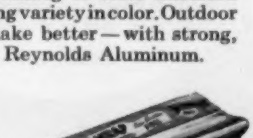
PROBLEM: Make maintenance-free, lightweight boats.

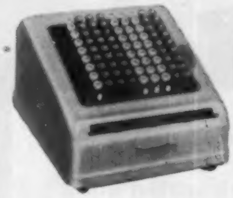
SOLUTION: For the boat market aluminum is the answer to quick, economical fabrication. Aluminum adds sales clinching features such as complete freedom from maintenance, lightweight for easy handling and top performance, shining good looks.

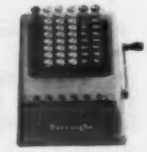
PROBLEM: Give outdoor furniture true weather resistance.

SOLUTION: Because it can never rust, aluminum makes outdoor furniture completely weatherproof. New furniture tubing of color anodized aluminum adds refreshing variety in color. Outdoor furniture is easy to make better — with strong, lightweight, rustproof Reynolds Aluminum.

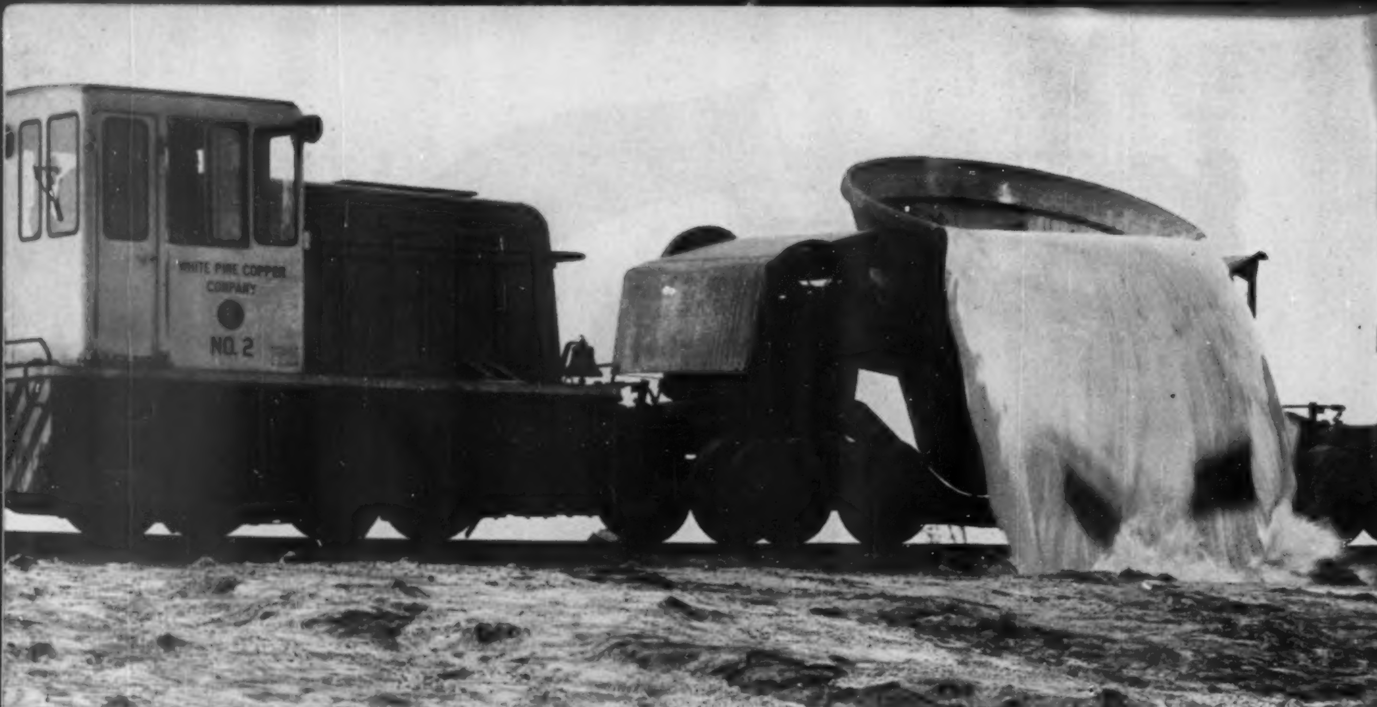
Makers of Reynolds Wrap






Burroughs


Burroughs



25-TON G-E DIESEL ELECTRIC hauls 500 tons of molten slag a day for the White Pine Copper Company in White Pine, Mich. Hauling slag from furnace tapping lauders to a slag dump is a rugged job and it demands a rugged locomotive.

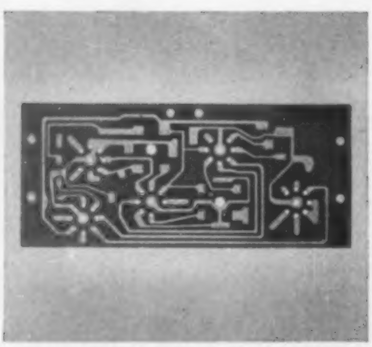
In most plants, if you:

- ***Move loads, large or small***
- ***Have track on the premises***
- ***Use haulage vehicles . . .***

YOU CAN LOWER GENERAL ELECTRIC'S

45-TON G-E DIESEL ELECTRIC saves the expense of costly maintenance for the Pullman-Standard Car Manufacturing Co., Michigan City, Ind. In all, *five* G-E locomotives handle Pullman-Standard's haulage loads at Michigan City.

Synthane laminated plastics report for work



Printed circuit for popular television receiver uses a metal-clad Synthane Laminate. Such a circuit eliminates wiring, wiring errors, saves space and weight.

Since the time when the heart of radio was the crystal and cat's whisker, Synthane laminated plastics have been the recommended insulation in the vital and ever expanding communications industry.

Turn on your TV or radio and Synthane goes to work as insulation in coil forms, transformers, tuners, plug-ins, switches, potentiometers, or as the metal-clad base for the entire printed circuit. Synthane also qualifies for important work in radar, sonar and guided missile applications.

Among the varieties of Synthane laminated plastics are several with insulation resistance and dissipation factor capable of controlling TV's high frequencies—even under tropically humid conditions. But Synthane makes over 30 grades—each with its own proportion of useful mechanical, electrical and chemical virtues. You can buy Synthane laminated plastics in sheet, rod and tube form or avail yourself of our complete fabrication service.

We have a number of interesting and informative folders on Synthane properties and applications. A post card will bring them to you promptly. Synthane Corporation, 1 River Road, Oaks, Pa.

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Furthermore, the services of Texaco Lubrication Engineers are always available to your plant operating personnel. These engineers are well-qualified to give practical help on lubrication problems—the kind of help that keeps production up and downtime low.

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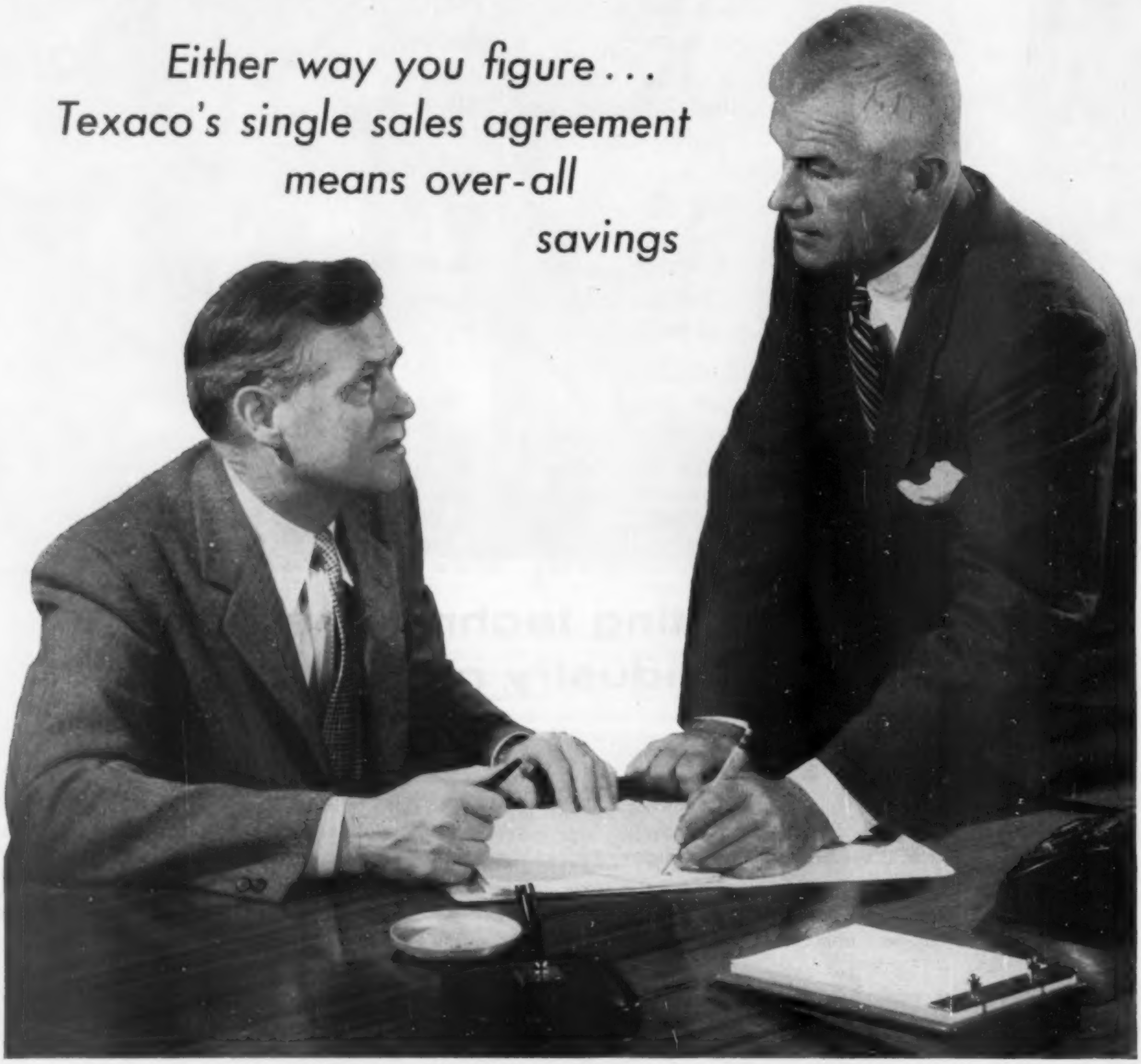

TEXACO

INDUSTRIAL LUBRICANTS

TUNE IN . . . METROPOLITAN OPERA RADIO BROADCASTS EVERY SATURDAY AFTERNOON

BUSINESS OUTLOOK

BUSINESS WEEK
APR. 27, 1957

A BUSINESS WEEK SERVICE

New construction may fall behind 1956 this summer. But, even if this happens, it should not be a cause of surprise—nor of dismay.

The shortfall will not be large in any case. And experts in the field see **a shelfful of contracts waiting to turn the tide.**

Work on construction projects, valued in dollars, actually has been at a record level so far this year. **But there are weak spots:**

- The records have been registered only by rather narrow margins.
- Two types of structures are running far below 1956 levels.
- Contracts for heavy work are off (though value of work put in place still is way ahead due to last year's spate of awards).

You should pay most attention now to new contracts awarded.

Engineering News-Record's figures on awards in the first quarter **ran 20% behind last year.** Even that doesn't tell the whole story, for **private** lettings dropped over 40% while **public** were up 20%.

But this McGraw-Hill publication sees a bright side; its records on **private projects ready for award** shows a pileup. A turn should be near.

Government money—federal, state, and local—is the thing that **has been bolstering construction this year.**

So far, work on publicly financed projects is 11% ahead of 1956. Moreover, this margin is widening (pushed steadily upward by the need for **highways, schools, water and sewage systems**).

Private construction is held back, of course, by **housing's slump.**

Dollarwise, the first quarter's drop of 7% in homebuilding and modernization nearly offset a 9% rise in nonresidential building.

This year's high level of construction is all the more remarkable in view of housing's troubles. Indeed, we **hardly would have been able to build so much else if housing had not slumped.**

New homes usually make up nearly one-third of all construction. And work on new houses (excluding modernization) fell to $2.6-billion in the first quarter this year from just under $2.9-billion in 1956.

Yet all construction (public and private) ran $300-million ahead for the quarter, totaling $9.1-billion against $8.8-billion.

About the only laggard in construction, aside from housing, has been **commercial building of the store-restaurant-garage type.**

Here **the dip started late in 1955** (about a year after housing turned, and that's no mere coincidence). But the decline didn't become clearly discernible until last autumn (BW—Oct.13'56,p20).

In this year's first quarter, the decline widened to about 17%—(nearly $80-million less than in the same 1956 period).

Industrial and public utility construction has been the big gainer so far this year among privately financed projects. Work on such structures neared $2-billion for the first time in any quarter.

That was about $250-million better than a year ago.

Office buildings also made quite a showing, up by some $50-million. (Other categories carrying plus signs add up to a respectable total, but their individual increases are relatively small.)

Gains in public construction (despite raw weather that held back road programs) pulled this type of work up to nearly $2.6-billion for the first quarter. A year earlier, it ran just over $2.3-billion.

Highways are the biggest single item with a value of $665-million for the three months and a gain of about $25-million.

But **schools** are close behind at $620-million. And the gain here is larger than in highways—almost $50-million.

—•—

One factor that lends assurance that privately financed construction won't slip far is **business planning for new plant and equipment.**

The latest McGraw-Hill survey of spending intentions shows the total edging still higher (page 41) despite some early-year business slack.

Structures are not taking quite as large a share of the plant and equipment dollar, of course, as they have in the past.

Modernization gradually is overtaking expansion (and the McGraw-Hill survey shows it will pull ahead in the next three years).

Yet construction is running over one-fourth of present $40-billion-plus outlays. The President's Council of Economic Advisers puts industrial and commercial building at an annual rate of $11.9-billion for the initial 1957 quarter. That's 8% ahead of a year ago.

Machinery needed for modernization and expansion now is being bought at an annual rate of $32-billion, the council estimates.

(At this time last year, the figure for production equipment was not quite $26½-billion a year.) **The year-to-year gain here is over 20%.**

—•—

Business is saving a fairly sizable piece of money on inventories that will help pay for its plant and equipment purchases.

The addition to inventory at this time a year ago was running in excess of $4-billion annually. Official figures now indicate that **the first quarter this year resulted in a very small minus figure** instead of the big pluses prevailing ever since 1954.

This relieves the strain on working capital—particularly important with Federal Reserve policy still keeping money tight (page 49).

—•—

This year's turnaround in inventory policy shows no sign of hurting employment (and purchasing power) very seriously.

There seems to be more talk than fact about layoffs so far.

The number drawing unemployment compensation has been declining (as it should in spring) a little more rapidly than was the case a year ago. And claims filed by those newly laid off during the first two weeks of April exceeded only slightly the same 1956 period.

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From McGraw-Hill's annual survey of Capital Spending

Plans for 1957 —up 12% over 1956 to $41-billion—still look rock-solid

Plans for years ahead suggest capital spending has reached a high, slowly-rising plateau. Companies already have $35-billion of spending in sight for 1960

Glimpse of the future: by 1960, manufacturing companies will have capacity 74% greater than in 1950. Industry will be spending $9-billion a year on research.

Three Solid Years Ahead

THE LATEST check of industry's $40-billion-plus capital program shows it rolling along under even power, just like a diesel in the corn country.

Many a business forecaster has been shaken this spring by the tremors caused by tight money and lowering profit margins. But the engineers pushing the country's capital program haven't felt the need to jam on the brakes. And there's no prospect they will.

The program shows impressive strengths:

• This, the third check in six months, puts the 1957 total for capital spending at $41-billion—a shade higher than the reports last December (BW—Dec.15'56,p31).

• Plans hold high right through 1960. Adding up the programs for the future that companies now have on their books, the indicated total for 1958 is $38.4-billion. For 1959, the figure is $36-billion. For 1960, it is already almost $35-billion. This sounds like a gentle slide, but probably isn't—for in the past, future plans like these have always grown as the time approached to turn blueprints into bricks, mortar, and machinery.

• To back up these plans for new facilities, industry is investing heavily in research. Spending for research and development will top $7.3-billion this year—up 20% from last year. This burgeoning research program forecasts a flood of new products and processes—and therefore of continuing high capital investment—in the future.

These are the most important findings of the 10th annual survey of business plans for new plant and equipment, conducted by the McGraw-Hill Dept. of Economics. The survey was made in March and April. The depart-

ment stresses that the survey is not a forecast, but a report on industry's own present plans.

I. Boost From Research

From the survey's findings, two key impressions emerge. One is the picture ahead of a capital program running evenly on a high plateau. It's not likely to show such sudden upward spurts as came between 1955 and 1956, when spending jumped 30%. Rather, spending is likely to hold at something like the $40-billion mark, probably climbing a bit as future plans harden up and as the research laboratories bring out more new products and new processes that require new facilities.

The second point emerging from the survey is the size and impact of research. The U.S. is plowing money into research and development laboratories on a scale that in itself constitutes a sizable capital program. Companies already expect that by 1960 their spending for research will run $9-billion a year. But, actually, if programs continue to grow at anything like the rate they have in the last few years, spending in 1960 will run well beyond that.

Whether you consider research an industry in itself, or only one aspect of company operations, it is one of the fastest growing activities in the U.S. economy. On the figures—from a $3.7-billion program in 1953 to nearly $7.4-billion in 1957—it is doubling in four years.

• **More to Come**—The impact of research promises to grow as rapidly as does spending:

• New products will be flooding in. McGraw-Hill economists expects the next four years to see more new products brought to market, and more new processes introduced in industry, than in any four-year period of the past.

• Companies are oriented more and more toward new products. One-third of all manufacturing companies this year report they are putting a significant share of their capital budgets into new products. A year ago, 28% were. In some industries—chemicals, and autos and auto parts are examples—half or nearly half of all companies are investing in new products now. By 1960, McGraw-Hill economists expect, half of all manufacturing companies may be putting a substantial part of their investment funds behind new products.

• Scientific manpower will get tighter (page 176). Industry wants to boost personnel by 7% this year.

II. Coming Changes

Taken over the longer run, industry's continuing high-level capital program and the force of research are adding up to tremendous changes in the U.S. economy. The manufacturing industries, for example, are raising their capacity sharply—it will be three-quarters again as large in 1960 as it was in 1950. From the end of 1950 through the end of 1956, capacity gained 42%. This year companies will boost capacity another 6%.

• **Slowing Down?**—Under present programs, companies plan to raise their capacity only 15% in the years 1958 to 1960. One reason for this slowing-up in the additions to capacity is that companies at the end of 1956 were operating below their preferred rates. McGraw-Hill's survey shows that manufacturing companies on the whole were operating only 86% of their facilities at year's end, would prefer a 90% operating rate with 10% in reserve. Only three industries—steel, nonferrous metals, and stone, clay, and glass products—were significantly above the rates at which they prefer to operate. Some industries were well below.

One result of this slowing down on expansion is that companies will be putting more of their money into replacing and modernizing facilities, rather than additions. This year, 52% of capital spending will be for added facilities, 48% for modernization. In the next three years, though, company plans call for an almost exact reversal of this proportion. Modernization will take 53% of the total.

• **Sales Forecasts**—These plans jibe with companies' own expectations of sales. Manufacturing companies as a whole expect their sales to rise 26% by 1960. They expect sales to rise 6%

Manufacturers Push Their Capacity Steadily Higher...

Index of Industrial Capacity (1950=100)

	1956	1957	Planned 1960
Iron & Steel	128	137	153
Nonferrous Metals	165	178	223
Machinery	165	178	208
Electrical Machinery	178	196	247
Autos	165	170	189
Transportation Equipment	216	233	266
Other Metalworking	138	146	175
Chemicals	163	178	217
Paper & Pulp	142	151	177
Rubber	145	152	172
Stone, Clay & Glass	136	143	160
Petroleum Refining	132	137	152
Food & Beverages	125	133	145
Textiles	123	127	137
Misc. Manufacturing	133	140	158
ALL MANUFACTURING	142	151	174

...And Research Spending Aims at $9-Billion a Year by 1960

(Millions of Dollars)

	1956	1957	Planned 1960
Primary Metals	$ 97.9	$ 109.6	$ 145.8
Machinery	506.2	577.1	704.1
Electrical Equipment	1,148.9	1,309.7	1,637.1
Aircraft and Parts	1,557.8	2,274.4	3,161.4
Fabricated Metal Products & Ordnance	165.2	173.5	209.9
Professional & Scientific Instruments	252.1	300.0	453.0
Chemicals & Allied Products	497.8	527.7	617.4
Paper & Allied Products	42.8	47.9	57.5
Rubber Products	73.1	81.9	95.0
Stone, Clay & Glass	58.5	66.1	80.6
Petroleum Products	204.8	225.3	277.1
Food & Kindred Products	76.0	85.1	96.2
Textile Mill Products & Apparel	33.8	36.5	42.3
Other Manufacturing	1,071.2	1,156.9	1,272.6
ALL MANUFACTURING	5,786.1	6,971.7	8,850.0
Non-manufacturing Industries	310.4	347.1	418.8
ALL INDUSTRIES	6,096.5	7,318.8	9,268.8

Data: base statistics (1953) National Science Foundation.

this year over last year, 19% from 1957 to 1960.

Capital goods companies take the prizes for both the highest expectations on sales and the biggest plans for increasing capacity. The machinery, electrical machinery, and transportation equipment industries are at the top of the list. Right behind them: chemicals and paper. These are all looking for sales gains of 30% to 36%, compared with the 26% average.

• **New Products**—It's here that research may play an even bigger part than many companies expect. Manufacturing companies now look for about 10% of their sales volume in 1960 to be in new products (products not made in 1956, or those changed enough to be considered new).

This figure—10% of 1960 sales in new products—is held down, of course, by the relatively low estimates of companies producing metals and other basic materials. Many industry forecasts are much higher.

The chemical industry looks for 16% of its 1960 sales to be in new products, the aircraft industry 40%. The fast-growing machinery and electrical machinery industries expect that 1960 will see close to 20% of their sales in new products—a figure that implies the introduction of a lot of new machines, and also completely new processes, in other industries.

But these preliminary estimates may turn out low. Many companies reported to McGraw-Hill that they are sharply increasing research spending—but they don't yet show comparable upturns in investment for new products. This is particularly true in the basic materials industries. If these companies succeed in their research programs, they may have more new products than they now expect.

III. Capital Programs

As the charts on the next page show, there have been shifts within industry on plans for 1957, but over-all, there has been no weakening. Business now plans to spend about 12% more in 1957 than in 1956. Electric and gas utilities show the biggest increase (up 22%). There have been increases since last fall's survey in the petroleum industry (up 11%), and in the group of industries labeled "other transportation and communications" (up 17%). That group includes telephones and other wire communications, radio and TV broadcasting, and all transportation other than railroads.

Plans of manufacturing companies are about the same now as they were last fall. Steel and the nonferrous metals companies are still expanding very rapidly. They're planning to spend more than last year—42% more for steel, 66% for nonferrous metals—as they reach the peak of a continuing drive for new facilities. Next year, as plans look now, there'll be a sharp drop in these industries—but spending promises to stay high in comparison with earlier years.

• **Metalworking**—Among those industries that use metal rather than produce it, companies making transportation equipment (including aircraft) are boosting their spending 58% over 1956—and plan to hold approximately at that increased level in 1958.

Two big capital goods industries—machinery and electrical machinery—are still growing rapidly. Machinery makers plan to keep outlays at close to $1-billion a year through 1960. The electrical machinery companies plan to raise their spending on their own facilities by 18% this year, level off for 1958 and 1959, and then raise again in 1960—a program that McGraw-Hill economists cite as one of the best examples of long-range planning they found.

In Detroit, the picture is different. Plans for capital spending in autos show a very sharp drop in 1957 (off 29%), and drop again in 1958 to less than half the 1956 level. After that, plans for auto spending are still in the air. Companies report that they have not decided one way or the other on changes after 1958.

• **Chemicals**—The fourth manufacturing industry planning to spend more than $1-billion this year, chemicals, will hold close to that level in 1958 and 1959. With the other process industries—rubber, petroleum refining, paper, and stone, clay, and glass—chemicals

Manufacturing Companies

(In Millions of Dollars)	1956 Actual*	1957 Planned	Preliminary Plans 1958	1959	1960
Iron and Steel	$ 1,336	$ 1,897	$ 1,328	$ 1,102	$ 992
Nonferrous Metals	601	998	609	353	293
Machinery	1,078	1,133	975	940	938
Electrical Machinery	603	712	705	712	762
Autos, Trucks & Parts	1,689	1,199	803	803	803
Transportation Equipment	460	686	638	415	369
Other Metalworking	887	928	844	834	854
Chemicals	1,455	1,906	1,849	1,720	1,651
Paper & Pulp	801	985	887	692	692
Rubber	201	217	228	242	223
Stone, Clay & Glass	686	633	508	493	455
Petroleum Refining	711	924	979	910	746
Food & Beverages	799	913	795	754	736
Textiles	465	399	317	327	331
Misc. Manufacturing	1,035	1,012	925	760	756
ALL MANUFACTURING	12,787	14,542	12,390	11,057	10,601

Non-Manufacturing Companies

(In Millions of Dollars)	1956 Actual*	1957 Planned	Preliminary Plans 1958	1959	1960
Petroleum					
Production	4,066	4,351	4,482	4,482	4,527
Transportation	261	355	462	374	303
Refining †	*711*	*924*	*979*	*910*	*746*
Marketing	426	460	437	446	442
Other	67	76	61	64	63
Mining	443	474	372	353	299
Coal	257	226	160	168	153
Iron Ore	45	69	61	52	48
Nonferrous	86	120	89	69	50
Nonmetallic	55	59	62	64	48
Railroads	1,231	1,366	1,188	1,129	1,152
Other Transportation & Communication	4,229	4,963	5,060	5,590	5,950
Electric & Gas Utilities	4,895	5,991	5,880	5,238	5,113
Commercial	8,236	8,401	8,065	7,178	6,317
NON-MANUFACTURING	23,854	26,437	26,007	24,854	24,166

† *Petroleum Refining is tabulated as a manufacturing industry.*

**U.S. Department of Commerce, Securities and Exchange Commission, McGraw-Hill Department of Economics.*

← Industry Plans Show Both Shifts, Long-Run Strength

show more long-range stability in plans than do the primary metals or the metalworking industries.

• **Non-Manufacturing**—The key to much of the strength in long-range capital spending plans lies in the nonmanufacturing groups. The oil industry alone (including refining, which is tabulated as a manufacturing industry) plans to spend more than $6-billion a year each year for the next four years.

Spending by the railroads is apparently becoming more stable. This survey discloses plans for spending from $1.1-billion to $1.4-billion a year through 1960.

The group of companies classified as "other transportation"—airlines, ship lines, barges, trucking, and so on—get a boost from two big programs now in the works: jet planes and ships. With order books filled for both, these companies will be boosting their spending each year in the years ahead.

Electric utilities plan to boost their spending 22% in 1957—part of their continuing drive to meet the U.S.' hunger for power. Together with the gas utilities, electric companies plan to spend almost $6-billion in 1957 and again in 1958—and already have plans calling for spending only slightly less in 1959 and 1960.

Commercial companies (mostly large chain stores, department stores, banks, and insurance companies) plan to spend about the same this year as last. But for the years beyond, their plans drop off sharply—apparently reflecting the difficulty of getting commitments for mortgages when money is tight.

• **Comparability**—McGraw-Hill's survey results run higher than those of the Dept. of Commerce (BW—Mar. 16'57,p42), and are not directly comparable. McGraw-Hill's survey covers primarily the larger companies (it includes companies that represent 50% of all employment in industries where investment is highest, 30% of employment in all business). Smaller companies do not necessarily plan the same way as larger ones do; so the two surveys can show variations. Then, too, McGraw-Hill classifies companies into industries on a slightly different basis.

Greatest difference between the two surveys is in the commercial field, where small firms—small stores and service establishments—have apparently cut their spending sharply for this year.

Atom Battle Gets Rough

● **Democrats will try to bargain their own atom-power program into law—by holding back on AEC fund requests and denying support to Administration measures.**

● **Their goals: more federal reactor construction, and reappointment of AEC Commissioner Murray.**

● **But renaming of Murray is doubtful, and Republicans rely on economy wave to hold down any federal program.**

The Congressional argument over the best way to develop the civilian atom is about to turn into a slugging match.

This became evident this week as Congressional Democrats completed their preliminary maneuvering and announced readiness to bargain for their version of what an atom power development program should be. What they want is a bigger say in what the Atomic Energy Commission is doing and at least a start on federal construction of power reactors.

To back up their demands, the Democrats plan to use these tactics:

- Withhold approval of AEC's appropriation request for power development for 1958.
- Refuse to confirm any nominee proposed by Pres. Eisenhower to fill the AEC vacancy left by the death of the late Dr. John von Neumann.
- Refuse to support the Administration's bill for federal insurance of commercial atomic power plants.
- Refuse to ratify the Administration-supported international atomic energy treaty.

The aim, of course, is to put across the Democrats' own program. Democrats haven't forgotten the defeat last year by Administration-led forces of the bill by Sen. Albert Gore (D-Tenn.) proposing a $400-million program of federal power reactor construction (BW–Jul.28'56,p105). Gore has reintroduced his bill this year—and it's still the first priority item on the Democrats' bargaining list.

The second is reappointment of Atomic Energy Commissioner Thomas E. Murray, whose term expires June 30. Murray, a Truman appointee, is the only remaining Democrat on the AEC. He has consistently disagreed with the policies of Chmn. Lewis L. Strauss. So have most of the Democrats on the Joint Committee on Atomic Energy.

I. Democratic High Cards

On the surface, the Democrats appear to hold the high hand.

One of their strongest cards is the fact that through Rep. Clarence Cannon (D-Mo.), chairman of the House Appropriations Committee, they have some new leverage on AEC's purse strings.

With the implied blessing of Speaker Sam Rayburn and other Democratic leaders, Cannon is firing at the AEC on the basis that it has been misinterpreting the 1954 Atomic Energy Act. He argues it has been doing this by spending money on its atomic electric power program without the prior Congressional authorization for every project that government hydro and steam plants must have. This, he contends, makes AEC's private atomic power program largely "in contravention of the law."

From now on, says Cannon, the AEC must obtain specific authorization from the Joint Committee for every project, or no appropriation will be made.

Cannon also joins in the general Democratic attack on AEC's private power program as too small.

What puts a punch in Cannon's views, of course, is the fact that he can make use of parliamentary rules to block AEC power program funds.

• **Support**—Joint Committee members say they aren't working with Cannon. Congressional sources say that's because they don't want to be tagged as sparking a public vs. private atomic power fight or to be accused of doing anything that might be construed as delaying atomic power development.

Yet they can play a part in the overall tactics. Here's what they plan. The Joint Committee has been holding closed hearings on the bill for authorization of AEC appropriations. After the Easter recess, these will go into the reactor part of the program.

The Democratic strategy will be to insist on authorizing specific projects as Cannon demands—and to demand a price from the Republicans on the committee and from AEC for what they authorize. The price will be acceptance by AEC of the authorization of a number of government power reactors.

Joint Committee members are in a fairly strong position on this point, because they have had word from AEC itself that AEC was willing to undertake construction of two large power reactors, but that it met with a firm "no" from the Budget Bureau. These were the natural uranium, gas-cooled reactor (such as the British are building), and the aqueous homogeneous type. Some leading Democrats have been plumping especially for the first of these.

Yet all may not be clear sailing for the Democrats. Republicans on the Joint Committee say the Democrats' maneuvers there won't succeed.

In the first place, they say, Cannon is wrong about the law. In the second place, they argue that an economy-minded Congress is not going to approve a multimillion-dollar federal atomic power program that can't be fully justified. And this one can't be justified because the AEC program is satisfactory, they say.

II. Complications

Neither the Republicans in Congress nor the Administration have yet come up with any specific answers to the Democratic strategy—yet the Republicans think they can whittle down the Democratic demands on federal power plants. Besides the economy wave, they hope that opposition to the Gore bill from coal-mining states will cut Democratic support, as it did last year.

• **Case of Murray**—The Murray reappointment complicates the picture still further. Democrats insist he remain on the commission. For one thing, he is their best source of information on what the commission is doing; Strauss, they say, has not kept them informed.

Republicans, on the other hand, feel Murray is responsible for much of the partisan fighting that has surrounded the atomic energy program the past two years.

Because there appears to be no room for compromise, Murray's reappointment is doubtful. Eisenhower can wait until Congress adjourns, then make a recess appointment and so delay the fight over confirmation until next year.

• **Insurance**—Another major complication in the atomic picture is federal indemnity insurance to cover liabilities of companies in case of catastrophe. In this area the chips have been down ever since General Electric Co.'s V-P. Francis McCune said last month his company would pull out of major atomic power projects unless Congress passed an insurance bill this session.

Actually, all sides agree on the need for federal insurance but this does not guarantee adoption of such a measure.

CROWDS at Easter followed pattern set last Christmas—a slow start, then a last-minute spurt that saved the day for stores.

Easter Shoppers Did

Retailers refuse to be elated by the 2% to 4% gain in sales during this year's season for buying Easter finery (pictures).

All across the country last week, merchants watched eagerly as their customers tried on new Easter bonnets and other finery. But this week, as they surveyed the results of Easter buying, few merchants felt like throwing their own hats in the air. Over-all Easter sales in department stores and specialty shops, as reported to BUSINESS WEEK correspondents around the country, were generally ahead of last year. But there were no thumping increases. "Satisfactory" was the adjective most merchants used to describe sales.

The calendar, of course, makes comparisons between this year and last tricky. Easter last year fell on Apr. 1. This year, it came 18 shopping days later, on Apr. 21. The late Easter distorts week-to-week comparisons. As a result, retailers generally are looking to the whole March-April shopping period as the most accurate basis for measuring this year's performance against 1956. With one week in April still to go, most stores are reporting gains for this two-month period of from 2% to 4% over the same two months last year.

• **Another Christmas**—This year's Easter shopping period parallels the 1956 Christmas season in many ways. Last Christmas, a slow start was followed by a spurt of buying that pushed sales ahead of the previous year. Easter has followed the same pattern. March sales, while running below 1956 levels because of the early Easter last year, were ahead of January and February, according to Federal Reserve figures. But any gains for the Easter shopping period had to come in April. And the first two weeks of April were sluggish. (It's true that for the week ended Apr. 6, Federal Reserve figures showed U.S. department stores 4% ahead of the same week in 1956, and for the week ended Apr. 13, sales were running 7% ahead. But these figures compare post-Easter weeks, so the percentage gains actually indicate slow buying for a pre-Easter period.)

The week before Easter, though, brought stepped-up buying. For many stores, sales that week ran much higher—anywhere from 6% to 35%, as in the case of a Chicago retailer—than the week before Easter last year. It was this business, for the most part, that established the modest gains for the entire March-April period.

Better Than Ever – But Not Much

In spite of the gains, however, there's no doubt that a lot of retailers are disappointed, just as they were with Christmas increases. By last month, merchants were already feeling cautious and uncertain about Easter (BW–Mar.23-'56,p60). But despite this, a big New York store official thinks, a lot of them began to set their sights too high. The result was a letdown. This feeling is echoed by the president of a Pittsburgh store: "Easter and Christmas, and any other supposedly special selling periods are never up to expectations. Outside of that, Easter was very good this year."

A lot of retailers bear this out. An important New York store, for instance, sets its gain for the period at 8%, and in Houston two chain department stores registered 7% increases for the two months.

But there are soft spots, too. Houston offers a striking case. Several apparel stores suffered 7% to 8% drops this Easter, at the same time that the chains were doing better. The explanation advanced by a store president is that the apparel stores cater to well-heeled groups who buy clothes whenever they feel like it, whereas the big chain stores appeal to groups interested in buying at Easter.

• **Snow and Colder**—That traditional enemy of the retailer—bad weather—loomed large in explanations for disappointing sales in some areas, particularly the Midwest. Though a New York executive voiced doubts as to the effect of weather on sales ("If people are in a buying mood, weather makes no difference") several cities blamed storms and cold for poor Easter showing.

• Denver was hit by a blizzard during the pre-Easter weeks. And the manager of a large store there admits the season won't match last year's. His only hope is that buying delayed now will help sales during the summer.

• Snow in Cleveland also hurt Easter sales. According to a store there, the pre-Easter week was considerably better than last year, but it fell far short of making up for the previous weeks of bad weather.

• In Milwaukee, because of bad weather, the March-April period seems to be running 2% behind 1956. "If we're lucky, we will just hold even with last year's figures," says a store executive.

• And St. Louis, where rains were heavy, has fallen 1% to 3% behind 1956 sales. The big stores, generally, held their own, but smaller retailers were seriously affected.

• **People's Choice**—Easter shoppers concentrated heavily on traditional lines, mostly apparel. It's clear that there were a lot of well-dressed moppets on parade this year—stores around the country reported strong sales of children's clothing. Women's hats, suits, and dresses did well, too, particularly in places such as New York, Atlanta, Chicago, and the West Coast. Shoes generally sold well. By and large, men's clothing stayed on the racks. A Worcester, Mass., merchant offers this explanation: "When a family comes into the store, it seems as though the old man tells the wife and kids to get themselves fixed up, and he'll get the old outfit cleaned."

As usual when customers are concentrating on wearing apparel, housewares, appliances, and furniture were slow to move in most stores. A St. Louis merchant, for example, said of appliances: "We didn't expect much, and we didn't get much." A striking exception to this picture, though, was on the West Coast, where furniture was especially strong this season.

• A Los Angeles store reported that it was selling more single pieces of furniture than sets—because it thinks, people are concentrating on redecorating their homes.

• In Seattle, where furniture is surprisingly strong, a store official guessed that families who can't build

new homes are investing in fixing up their present dwellings.

• **Prices Right**—There was no indication this Easter of any consumer resistance to prices. In fact, quite a few stores suggest a trend toward continued trading-up. Says a spokesman for a New York store: "Customers are interested in better quality merchandise and are willing to pay for it." An Atlanta retailer puts it even more strongly: "More than ever, customers—particularly women—are willing to pay for what they want, but more than ever before, it must be just what they want."

Apart from a parade or two or an anniversary sale, few stores went in for much special Easter promotion. In fact, there were scattered signs that stores slowed up on newspaper advertising.

In Louisville, for instance, newspaper linage by women's clothing stores was down 24% for the first quarter of this year. Men's clothing store ads were down about 39%, and department store advertising 5%. A large group of Milwaukee stores report drops in newspaper advertising for the first three months of this year.

Other cities, such as Detroit, Los Angeles and Atlanta, saw store resistance to increased newspaper rates. A Philadelphia store admitted cutting back on its advertising expenditures by 10%. "Space rates are just too high," a store executive said.

• **Inventories**—In contrast to the post-Christmas season, when inventories were high, most stores say their stocks are now in healthy shape. Cleveland, because of its disappointing sales, reports fairly heavy inventory, and stores there plan to push post-Easter sales to move the merchandise. Other cities report heavy stocks of one item or another, such as coats in Detroit; suits and coats in St. Louis, but over-all nobody seems to be worried about inventories.

Nevertheless, stores are virtually unanimous in saying they will buy cautiously for a while. A Chicago merchant points to the availability of merchandise, and says he doesn't want to tie up money that he might need later for up-to-date goods.

About the rest of the year, stores are hopeful. A Philadelphia store official says that "right now, the consumers' mood is all right, but lacking in real enthusiasm." Most stores hope to end the year 3% to 5% ahead.

Canadian retail sales started the year briskly, with an 11.5% increase in January and 8.5% in February. March seems to have held up well, too. But, says a Toronto merchant, Canada doesn't count so heavily on Easter as the U.S. does. It's more concerned with pushing summer sales, and is stocking up in anticipation.

SECOND-LINE hotel in Detroit, one of the Milner chain, is being converted into a . . .

Low-Rent Home for Aged

Second-line hotels, caught off balance by the postwar boom, are waging a desperate struggle for survival. The prime difficulty, of course, is that their customers have dwindled. The well-heeled expense account crowd has switched over to the high-tariff hostelries; and the motorist on a budget has deserted to the roadside motel.

Caught in this squeeze, the low-priced hotel—which usually can't afford the extensive remodeling needed to make it competitive with its air-conditioned, room-with-bath betters—faces two alternatives. It can let itself run down until it moves into the flophouse category; or it can sell out to somebody who'll use it for something other than a hotel.

• **Salvation**—This week, Herman J. Daldin, president of Milner Hotels Management Co. of Detroit, announced a plan designed to sidestep both eventualities. The Milner chain will spend more than $2-million to convert at least 25 of its 200 hotels into residences for the aged. The company's Fulton (Ky.) hotel already has been turned into a retired person's home, and Milner hotels in Detroit (picture), Chicago, and St. Louis are in the process of being converted.

"We are going to cater to the older folks on a nationwide basis," says Daldin. "The idea is to fill up the vacant space wherever possible." Daldin won't reveal the Milner chain's financial status, but emphasizes that it's "definitely in the black and is doing better this year than in 1956."

• **Facilities**—No detailed plan for converting the hotels for the aged can be drawn, Daldin says, because of the wide variety of buildings and difference in location. But he says facilities for medical attention, entertainment, and food will be considered essential in every case. At Fulton, a parking lot adjoining the hotel was made into a playground with facilities for quoits and croquet. Residents are fed at a nearby restaurant, and a physician is available 24 hours a day.

Rates also will vary according to locale. Everett Downing, manager of the Hotel Taft in Detroit, says that hotel will charge from $37.50 a month for two in a room to $53 for private bath. That sum includes telephone, elevator, and once-a-week maid service.

Daldin says the idea for the Milner program stems from conversion of two independent hotels in Florida two years ago, but he believes his plan is the first to be tried nationwide.

Milner plans to work with social and charitable groups and city officials whenever possible. "Anything that will provide decent homes for the aged is fine," says a member of the National Committee on the Aging. "But these things must be investigated carefully."

Fed Renews Firm Grip on Credit

● The signs earlier this year that the Federal Reserve might relent in its tight money policy turn out to have been misleading. It was only marking time.

● Once more, the Washington experts are convinced that an inflationary wage-price spiral threatens the U. S. economy—despite admitted areas of softness.

● So, in hopes of encouraging business to pare prices as a stimulus to buying, the Fed now says it will keep the clamps on the nation's supply of credit.

After months of marking time on credit policy, the nation's monetary managers decided this week to start attacking inflation once again. Officials at the Federal Reserve in Washington acknowledge that there are soft spots in the economy, but they clearly emphasize that they are pursuing a restrictive policy to keep prices in check.

This hardening of the Fed's attitude was quickly felt in the money market. Long-term government bonds plunged downward toward the lows hit last December, and the net borrowed reserves of the nation's banks—the difference between their excess reserves and their borrowings from the Fed—were $671-million last week. In January, the banks had been entirely out of debt to the Fed.

• **In Earnest**—Even more significant, the regional Feds were warning member banks against staying in hock. This "open mouth" technique was taken by bankers as a sign that the Fed means business.

The Fed is utilizing "open mouth" methods in another fashion. In contrast to the usual policy of letting the figures do the speaking, Federal Reserve officials are now talking with unusual freedom. The point they stress is that credit will remain tight.

This is obviously intended to end the confusion that has prevailed in the money market. Many observers believed that the Fed would ease up as business leveled off, and the Fed itself seemed to be doing so for the first three months of the year. Certainly, it was no longer pressing credit restraint the way it had done through 1955 and 1956.

I. Return to Restraint

Actually, the Fed is in part responsible for the confusion in the money market. The traditional indicators of monetary conditions, the Treasury 91-day bill rate and the weekly figure for net borrowed reserves, have both been fluctuating in a fairly broad range during the past three months. And Fed Chmn. William McC. Martin himself recently characterized credit policy as "passive," a term that was interpreted by most money market men to mean a move away from tightness.

• **Spiral Ahead?**—Now, the Fed is once again talking restraint. High officials appear no longer worried about the leveling off in economic activity. Instead, as they see it, there is considerable danger of a wage-price spiral unless credit is kept tight.

One top official frankly states that "inflation is not a theory we are dealing with—it is an actual condition." He points out that though business has moved sideways, prices have remained inflated. If there was any easing in credit, it would only serve to justify today's inflated prices.

In support of this point of view, Fed officials cite the cost of living index, which recently nudged higher for the seventh successive time. They also point to a general feeling that business confidence has improved markedly—particularly as seen in the stock market.

However, price cuts, according to the Fed, would create demand which would pave the way for a new upturn in economic activity. Business, it feels, can afford to make such price cuts. This is the remedy it suggests for the current situation, and the policy of keeping pressure on credit is aimed at bringing this about. "Nothing is really in short supply today," states a Fed policymaker. "Price adjustments would encourage a new surge of buying."

• **Relax**—Top officials are not worried that the pressure they put on the money market may bring a downturn. On the contrary, they are critical of easy money enthusiasts. "This economy is not a weakling that needs a dose of smelling salts when there is a little slowdown," said one Fed economist. "All the patient needs is a little rest."

The fact is that the Fed is very conscious that it eased credit too vigorously in 1954 and did not tighten up quickly enough once the recovery got under way in 1955. Officials, admitting that they miscalculated then, wish to avoid doing the same thing now. And it appears quite plain that they are prepared to resist appeals for looser credit—from Congress or other quarters.

This does not mean that the Fed intends raising the discount rate, which inevitably would be followed by hikes in bank lending rates. The present policy of restraint will not take the form of any overt action, at least not immediately. Instead, it will be a matter of maintaining pressure on the banking system in order to keep borrowing from growing too fast. Says one official: "We should not supply credit to people to carry inventories they shouldn't have acquired."

II. Significance

What the policy does mean is that the Fed is prepared to make credit available for normal growth and for the usual seasonal requirements. But it is definitely intent on limiting the supply of funds as long as the economy is operating so close to capacity.

One factor intended to keep the Fed from any overt action is the position of the U. S. Treasury. It has a big refunding coming up next month and is continuing to face redemptions of savings bonds. Fed officials recognize the Treasury's difficulties and are prepared to help smooth the Treasury's path, although it will not engage in any supporting action. "Those days are over," said one official. "We will help the Treasury only when they satisfy us that they are in line with the market."

• **Causes**—Fed officials put great stress on the idea that the market, not the Fed, is responsible for tightness. There is little doubt that demand for credit is contributing to the rise in interest rates. But the Fed, by keeping a tight rein on the supply of credit, is definitely playing an active role.

The big question is just how far the Fed will push its restrictiveness. On this point Fed officials tend to clam up, claiming that it will depend on the course of business. There is considerable disagreement among Fed officials on the business outlook, with the majority feeling that the current leveling will be followed by an upturn. But even the minority says the economy needs some restraint right now.

"We can always turn around quickly if a decline sets in," says one Fed official. "And meanwhile, restraint will help to bring prices under control."

Old Houses Get Harder to Sell

● **Demand is sagging along with that for new homes.**

● **Some people who would otherwise be in the market for used houses, rather than new ones, can't finance them. Terms are tougher for existing houses, and money scarcer.**

● **Brokers find they have to work harder, think up more gimmicks, to sell existing homes.**

All through the lush postwar years, a Philadelphia real estate broker boomed himself as the city's "sale-a-day realtor." Last year, he was still advertising, but was using smaller type. This year, he advertises no more—he's out of the business.

In Chicago, realtor Robert Bartlett, whose postwar territory covered that city's northern suburbs, has ceased selling houses because "prices, interest, and down payments are too high." He now concentrates on selling lots.

In St. Louis, a veteran real estate salesman complains: "It takes nine months to close one deal these days. . . . It's too long between drinks to make the job interesting any more."

• **Business Slowdown**—The cause of disenchantment in each case is the same: the snail-like pace of the market for homes that were built from 2 to 20 or more years ago.

With new construction ebbing, fewer old homes go on the market, and the resale volume declines. Add to that the pressures of tight money and the preference of investors for the lower risk of loans on new homes, and you find that the marginal operators are being weeded out of the realty business.

One national figure illuminates part of the realtors' troubles: Applications for Federal Housing Authority-insured mortgages on existing homes totaled 18,410 in March this year, compared with 26,067 in March, 1956.

Declining business is certainly the national trend for real estate brokers who handle existing homes. BUSINESS WEEK reporters, surveying the market for these homes this week, found sales off as much as 40% in Detroit, as much as 30% in Philadelphia, about 10% in Chicago, 20% to 25% in Portland, Ore., 27% in San Francisco.

• **Against the Pattern**—In some cities, local conditions produce a different picture.

In Memphis, a spate of urban renewal and expressway building will displace more than 5,500 families in the next three years, and each will be eligible for a 40-year FHA-insured home loan up to $9,000 at 5%. The first of these families are moving now, and they're spurring a pickup in sales of existing homes.

In Houston, a lag in apartment-house building in the last few years is keeping much of the city's rental housing jammed to capacity, and sales of existing homes remain steady.

In Los Angeles, realtors say business is stable because more and more families want to move from distant suburbs back to established communities, where they'll be closer to work and to schools.

But all these are special situations, outside the national trend. The general picture is one of slow turnover, slightly reduced prices, complex financing deals that consume weeks of effort and demand a mastery of finance among real estate brokers and their salesmen.

I. Two-Part Market

Over most of the nation, brokers find their business splitting into two distinct markets. They say it's virtually impossible for them to sell homes priced at less than $12,000 or $13,000. For these, government-insured mortgages are practically never available these days, and prospective buyers for this type of home can almost never raise the down payments for conventional financing.

Just about all the brokers' business today is in homes over the $15,000 mark. This higher-priced market again splits into two. Homes three or four years old are by far the easiest to move. Those more than 15 years old are slow sellers.

• **Price Dip**—In the current squeeze, brokers find that it's not just sales volume that's down; sale prices have slipped, too, in many areas. In Philadelphia, prices for existing homes have fallen 15% in a year; in Columbus, Ohio, 10%; in Milwaukee, 5%. Elsewhere, in the Middle West, the South, the West Coast, prices are down, generally by 5% or less. Again special situations break this national pattern.

The small national price decline has come despite the firm opposition of most sellers. Real estate brokers everywhere bemoan the sellers' attitude.

"From the prices they ask at first, some of these people apparently think they live in castles," says a Midwestern realtor.

"They keep asking for prices that they might have got 10 years ago—and they don't allow for a decade's depreciation," another complains.

• **Difficult Deals**—Because FHA and GI loans are practically nonexistent (an Ohio broker was offered one last week at a 12% discount), the brokers have had to turn to a wide variety of financing gimmicks to keep their firms going.

In Philadelphia, one broker advertises: "Buy a house—$20 down, $20 a month." What he's actually selling are shares in a building and loan society. In seven years, the share-buyer will have accumulated around $2,000, enough for a down payment on a low-priced home.

Second mortgages, once looked upon as almost immoral, have lost some of their stigma and are being used more and more by buyers of existing homes. In Portland, Ore., there are 70% more second mortgages out today than there were two years ago. They are, however, discounted at rates ranging from 20% to 60%. Money for these comes often from individual investors. But in some cities—Pittsburgh, for example—some bankers won't permit home buyers who borrow from them to carry a second mortgage.

Brokers with slow-selling, lower-priced homes on their lists are also trying lease-purchase agreements or land contract deals to speed turnover. In these contracts, the real estate broker accepts a low down payment from the buyer, holds title to the home, and collects the contract payments until the buyer has enough equity to go to a bank for his prime mortgage money.

• **Turn-Ins**—Trade-in deals, too, are becoming more common. Brokers, testing trade-in deals warily a year ago, are getting bolder. A Milwaukee broker who sold 45 houses last month handled 10 of them through trade-in deals. In Columbus, Ohio, one broker has a policy of guaranteeing to sell a client's old house at a certain price within 30 days or to buy it himself.

Brokers who were interviewed by BUSINESS WEEK reporters say they haven't yet been left with an unsalable trade-in house, but they do confess to spending a few anguished weeks trying to move some slow-selling trade-ins.

• **Shuffle**—Now they are learning the even more ulcer-provoking methods of "shuffle" deals. On the face of it, these deals are merely complicated trade-ins, but they're so different in degree of complexity that they become different in kind.

One example: A Midwestern broker with a $22,500 house for sale found a

buyer who had clear title to a $15,000 home. He introduced this client to another with $6,000 equity in an $11,000 home, then brought the two together with a third client who had a $2,400 equity in a $9,500 home. The broker took the $9,500 home in trade for the $11,000 place, and everyone moved up a notch. The broker has finally filed the papers covering the complicated financing, but he's still trying to sell the $9,500 house.

One Richmond (Va.) real estate salesman is just regaining normal composure after spending almost a year organizing a similar type of deal involving six houses. However, he has managed to get rid of the lowest-priced home involved, selling it to a family moving from an apartment.

II. Special Talent Needed

To handle deals like these, real estate brokers are realizing that they can rely only on the smartest type of salesman. In one Southern city, some brokers are canvassing the graduating classes of the state universities in their search for talent. All over the country, part-time salesmen are being pushed out of the business. In some cases, real estate boards won't grant them licenses; but generally the brokers themselves are refusing to keep them on their staffs.

"This is no business for the weekend salesman—our men have to know the minutest details of possible financing arrangements," says a California broker.

Only infrequently have the brokers cut their staffs of full-time salesmen. But turnover of these men still is high. They leave one agency, go to another, complaining that they couldn't earn enough money.

Today, classroom training in real estate law and financing arrangements is much more important to the salesmen than schooling in a hard-sell spiel. In many cities, brokers send their salesmen to seminars on law and financing, and large agencies conduct after-hours schools for their men.

• **Some Optimism**—Now that brokers are learning how to run their businesses under these tougher conditions, they're regaining optimism. In a few cities, they have ground for hope. In Pittsburgh, Columbus, San Francisco, and Portland, Ore., for instance, they say money for loans is becoming a little easier. Savings and loan associations provide most of this extra credit at 6% to 7½%.

But in most other centers, money to finance used houses is as hard to find as it was six months ago.

"Still," say some brokers, "we can hope. After all, new housing has dropped, old housing is down—there must be a market accumulating somewhere."

Some Products Grow Much Faster Than Others

These have averaged at least 40% production growth per year . . .

Titanium (since 1949)
Power brakes (since 1952)
Antibiotics (since 1944)
Television sets (since 1940)
Foam rubber mattresses (since 1947)
Home dryers (since 1947)
Vitamins (since 1938)
Detergents (since 1935)

These have averaged 30% to 40% a year . . .

Room air conditioners (since 1939)
Electric shavers (since 1932)
Tape recorders, home use (since 1951)
Pickup hay balers (since 1940)

These have averaged 20% to 30% a year . . .

Diesel locomotives (since 1932)
Air passenger-miles (since 1929)
Garbage disposers (since 1947)
Electric blankets (since 1946)
DDT (since 1944)
Home freezers (since 1946)

These have averaged 15% to 20% a year . . .

Distilled spirits (since 1929)
Frozen foods (since 1938)
Magnesium (since 1930)
Canned fruit juices (since 1929)
House trailers (since 1940)
Plastics and resins (since 1929)

These have averaged 10% to 15% a year . . .

Truck transportation (since 1929)
Aluminum ingots (since 1929)
Dishwashers (since 1947)
Food mixers (since 1938)

These have averaged 7½% to 10% a year . . .

Electric ranges (since 1929)
Oil pipelines (since 1939)
Rayon and acetate (since 1929)
Gypsum wallboard (since 1929)

These have averaged 3% to 7½% a year . . .

Electric refrigerators (since 1929)
Marketed natural gas (since 1929)
Telephones in service (since 1929)
Rubber consumed (since 1929)
Cigarettes (since 1929)
Motor fuel (since 1929)

National average of annual production growth—3%

These have averaged 0% to 3% a year . . .

Electric toasters (since 1929)
Canned vegetables (since 1929)
Steel ingots (since 1929)
Automobiles (since 1929)
Railroad freight revenue (since 1929)
Raw cotton (since 1929)

These have actually been declining . . .

Refined lead (since 1929)
Railroad passenger revenue (since 1929)
Coal (since 1929)
Work shirts (since 1929)
Cigars (since 1929)
Railroad cars (since 1929

Data: Commerce Dept.

New Products Set the Pace

As every businessman in a stagnating or declining industry knows, the dazzling burst of production in the U.S. since 1939 is far from the broad, sweeping advance that national averages seem to indicate. Now the Commerce Dept. confirms it through a study of trends in 288 products and services. Averages are calculated (table above) from 1929 or from the first year of substantial production.

The national average shows a gain of 3% a year since 1929. About one-third of the 288 items gained at least 7½% a year, about half gained less than 7½%, and the rest showed declines.

However, the report doesn't reveal fluctuations in growth within the period under study. For example, autos averaged a 2.1% annual gain since 1929, but they would average 4.4% annual gain if 1919 were the take-off point.

As might be expected, the 37 fastest-stepping products have all been introduced in the past 25 years or so, and most of them since the war.

In Business

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Integrated Steel Mill for Montreal? Three Companies in Race to Build It

The next integrated steel mill on the North American continent may be in Montreal. This week, BUSINESS WEEK learned that at least three companies were in the race to build the mill:

Dominion Steel & Coal Corp., Canada's second largest steel producer, wants a Montreal mill to supply existing fabricating plants. Dosco's present mills in Nova Scotia are woefully remote from the major market stretching from Montreal to Windsor, Ont.

Quebec Iron & Titanium Corp., a U.S.-owned company, is already expanding. In its own steel mill, it could use the byproduct iron slag from its titanium operation.

An unnamed U.S. producer of basic steel—trade observers believe it's Kaiser, which is also eying Quebec iron ore—has hired Montreal's Economic Research Corp. to study the area market.

The market that all three are considering is a fat one; government statistics credit Quebec with having consumed an average 26% of the steel used in Canada between 1951 and 1955. Canada's own production of steel last year was 5.3-million tons—over 45% of it by Steel Co. of Canada.

The biggest hitch to building the Montreal mill, especially for Dosco, is cost. A 450,000-ton-a-year mill to produce flat-rolled products would cost at least $100-million. Traditionally, Montreal's worst steel shortage has been in plate and wide flange structurals not produced in Canada.

A Bank of Nova Scotia survey has pointed out the advantages of a Montreal mill on the St. Lawrence, using Labrador iron ore and U.S. coal, brought in ore boats returning empty through the Seaway from Lake ports.

The predicted sale of a major share in Canada's **Algoma Steel Corp.** to British, German, and Canadian interests (BW—Apr.20'57,p54) became official this week. **Mannesmann Tube Co.**, subsidiary of a German company, bought the biggest (200,000-share) slice of the one-third interest in Canada's third largest steel producer, sold by the estate of Sir James Dunn. **A. V. Roe Canada, Ltd.**, subsidiary of Britain's Hawker Siddeley Group, bought 150,000 shares, **McIntyre Porcupine Mines, Ltd.**, 100,000 shares, and British investors represented by the Royal Bank of Canada, 50,000 shares.

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First New York Savings Banks Boost Interest As Harriman Vetoes Legislative Ceiling

The gates swung open this week for higher interest rates on savings bank deposits in New York, when Gov. Averill Harriman vetoed without comment a bill that had slid quietly through the legislature, in effect clamping a 3% lid on interest (BW—Apr.6'57,p94).

Right on the heels of Harriman's veto, a rise to 3¼% was announced by two big savings banks in Brooklyn, and two others were expected to follow suit by the end of this week. These four, and others, had been all set to raise their rates to 3¼% when the Albany bill was suddenly passed. They were then persuaded to hold off until the governor took action.

• • •

Bank Handles Art Sales on Time Rates Are Lower Than for a TV

In Pittsburgh, you can buy a painting or a piece of sculpture on time, just like a television set or an automobile. In fact, the interest charges on the art will be lower.

This happy state of affairs is due to a deal worked out by Pittsburgh Plan for Art—a non-profit promotion group—and the Western Pennsylvania National Bank (BW—Dec.1'56,p53). PPA has been lending art works—mostly by local artists—for exhibits in the area. The same works have also been up for sale, at prices running from a few dollars to several hundred.

Now the bank will finance purchases above $75 by non-recourse loans to the buyers. PPA makes the contacts, the bank takes the risks.

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Business Briefs

The first "package power" reactor will be dedicated next Monday at Fort Belvoir, Va., by military and AEC bigwigs. The 1,855-kw. unit, built by ALCO Products, Inc., will be part of a permanent Army training setup. But it was designed so that each major component could be transported by a single plane. Thus, the Army says, similar reactors will be useful at remote installations; first use will probably be to supply power at early warning radar bases in the Arctic.

Ernest T. Weir this week stepped down as chairman of National Steel Corp., three months before his 82nd birthday. Weir will continue as a director, but Pres. **Thomas E. Millsop** will take over as chief executive officer when the board reorganizes on May 16. Weir will recommend a new chairman then, with speculation centering on Pittsburgh Consolidation Coal Co.'s George H. Love and Millsop, or—if the board is enlarged to admit an outsider—maybe even Treasury Secy. George M. Humphrey (p. 58). Insiders say technical reasons militate against Millsop.

The Texas oil allowable for May was cut 82,156-bbl. a day below the Apr. 13 figure by the Railroad Commission. Production will be based on 16 days in a 31-day month. The cut—to 3,474,834 bbl. a day—was slightly larger than that made in April, after the March peak to permit shipments to Europe.

WASHINGTON OUTLOOK

WASHINGTON
BUREAU
APR. 27, 1957

A BUSINESS WEEK
SERVICE

Tax cut prospects will clarify within the next 90 days. In that time, you will get two major indications of the spending-revenue trend:

• **Congress will finish up its budget cutting**—make whatever savings it is going to make in Eisenhower's record 1958 peacetime spending schedule.

• **The business trend will be clearer.** This will be the clue to the income side of the federal budget—determine the government's "take."

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The outlook as of now—in current Washington forecasts:

Congress will cut deeper than was expected at the start. Spot checks with members who went home for the Easter recess show them under pressure to cut Eisenhower's budget. It's a personal follow-up of the mail campaign that has been running since the budget went to Congress in January.

But here's a point to keep in mind: The cuts already voted by the House and those that will be O.K.'d later by both House and Senate won't show fully in reduced spending in fiscal 1958. Reason is that most of them are cuts in programs—money for future years—rather than in the cash that Eisenhower plans to put on the line next year. There will be savings, and they will be substantial. But in 1958, they will be less than half the $5-billion to $6-billion Congress will be boasting about.

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Leaders of both parties now back a 1958 tax cut. You see this in the statements that have come from Speaker Rayburn, the House Democratic boss, and from House Minority Leader Martin, the GOP chief, since Eisenhower came up with some economies of his own.

But politicians are talking about what they hope for—big spending cut for fiscal 1958, and high revenues resulting from high business levels.

Eisenhower will have the upper hand on tax cutting. He can veto any relief bill, and associates say he will unless the spending-revenue outlook assures him of what he wants.

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Here are Eisenhower's conditions, as pictured by his aides:

The budget must be balanced. Predictions are made that the President will veto tax relief, even in an election year, if it threatens red ink.

And there must be a surplus left for debt reduction. Eisenhower feels strongly that any surplus revenues collected in good times must be used, at least in part, to pay off some of the debt. He is said to like the idea of an annual curtailment of at least $1.5-billion. You have noted official statements pointing out that the retirement of debt in the last fiscal year, plus what's in sight for the current year and for 1958, will add up to $5-billion in the three years. That's important to Eisenhower.

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So here's what is needed for a tax cut—one that Eisenhower can take without giving up his balanced budget and debt retirement aims:

A surplus of $4.5-billion-$5-billion. Right now, there is nothing of that magnitude in sight. In fact, it may well develop that official estimates of the surpluses ahead are on the high side and will have to be revised. For example, defense spending for the current year is on the rise.

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The fight to cut the budget will be intensified.

What members learned during the Easter recess is that constituents expect Congress to save enough to justify tax cuts.

WASHINGTON BUREAU
APR. 27, 1957

Foreign aid will be singled out. Eisenhower may have to take a cut of as much as $2-billion in his new foreign aid request of $4.4-billion.

Defense won't escape the ax. It accounts for well over half the total budget of $71.8-billion. And Congress is convinced there's padding.

Eisenhower's own trimming of requests will be used against him. The line from Democrats, and many Republicans, too, is that the budget revisions, totaling $1.8-billion, offered by the President last week showed that there are soft spots in the budget.

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One example in Eisenhower's revisions is in foreign aid. Eisenhower suggested that Congress might save $500-million here. His explanation was that "new management techniques" have made this possible. Congress knows that these techniques haven't been perfected since January, so members regard foreign aid as having been "padded out" originally.

Another is the bad soil bank estimate. In January, Eisenhower estimated this would take $1.2-billion for payments to farmers. He's now cut the estimate by over $250-million, nearly 25%.

Then there's the $500-million-plus Army cut. Eisenhower says he put in this authorization now to facilitate planning for fiscal 1959. His critics in Congress say it's money that may never be needed, that Eisenhower put it in this year in order to hold down Army authorizations next year—the year when all House members and a third of the Senate will be up for reelection.

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Defense may be trimmed as much as $3-billion. The feeling in Congress is that this can be taken out without actually weakening military strength in any important way. In fact, the military itself is in a running debate over just what will be needed to fight World War III, if it comes. The dominant thinking today is that an atomic war will be short, and will be fought largely with the arms at hand at the start.

Watch for the Pentagon to shift on manpower needs. Right now, there's a debate over what the "ready reserve" should be. Under present law, the men coming out of the services can be held in active reserve for about six years. The current aim is 2.9-million men in ready reserves by 1960. It may be cut to 1-million.

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Now, back to taxes. Odds are you will get a cut on your 1958 income. But Eisenhower may well delay it until the middle of next year.

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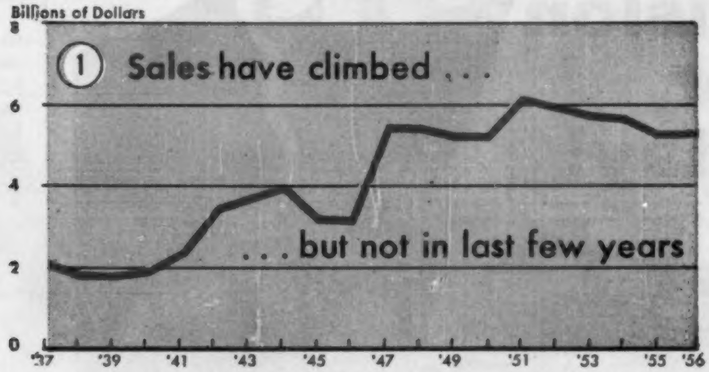
There will be some Cabinet changes this summer—retirement of some of the "elders" Eisenhower brought in with him in 1953.

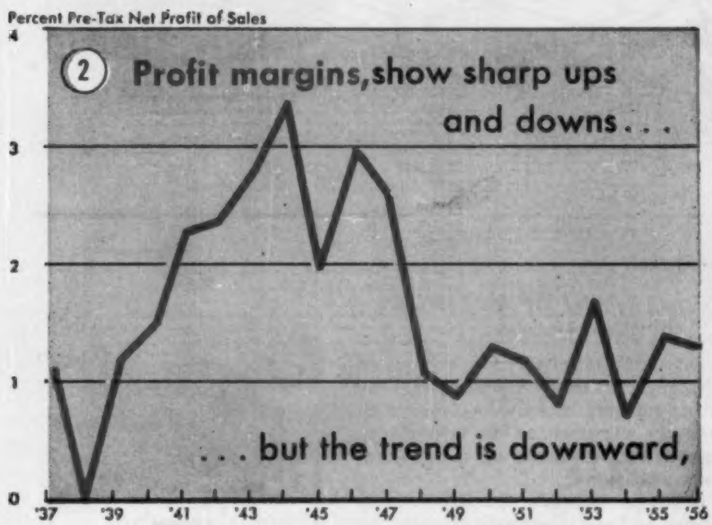
Defense Secy. Wilson still plans to go after Congress has finished up with the defense budget for fiscal 1958.

Secy. of State Dulles is rated a good bet to resign. His reasons will be a combination of age and health. A quieting in the Middle East might well set the stage for his retirement, with Under Secy. Herter taking over.

Treasury Secy. Humphrey is expected to go. He has been out of line on Eisenhower's big budget right from the start. And for the last two years he has personally wanted to quit the government. But he's expected to stay until the budget is acted on by Congress and the Byrd Senate committee has had its look at monetary policy.

Problem of the Big Four Meat Packers:





So . . .

Packers Want to Diversify, Too

But the 1920 consent decree in the government's antitrust case makes it impossible. Now they want the ruling modified so they can compete with supermarket rivals on their own ground.

It's obvious from the charts above that the so-called Big Four packers—Swift, Armour, Wilson, and Cudahy—still play a major role in the multi-billion-dollar meat industry.

But despite their combined sales of more than $5-billion last year, it's equally obvious that these companies haven't been booming the way other sectors of business have.

- Since 1950, the Big Four's sales have been practically at a standstill.
- In the same period, profit margins—notoriously low in the industry anyway—have been skidding recklessly.

These mournful statistics are the background for a current move by three of the Big Four. They're trying to induce the Justice Dept. to modify one of the most notable consent decrees in a U.S. antitrust case—the 1920 ruling under which Swift, Armour, Wilson, Cudahy, and now-defunct Morris & Co. agreed to limit themselves almost entirely to packing and processing meat products.

- **Exception**—Wilson & Co. isn't a party to the present proceedings. Pres. James D. Cooney says the decree doesn't affect Wilson any longer—the company has since been reorganized, and the executives who signed the decree aren't with Wilson now anyway.

But the other three packers are eagerly after a formal decision that would give them the right to diversify—something almost every other type of business can do.

- **Precedent**—This week, by coincidence, the packers won new ammunition for their basic argument: that while others in the food industry have been able to invade the meat business in competition, their resistance has been crippled by a decree "entered more than a generation ago which is obsolete and unneeded."

What happened was this. Food Fair Stores, Inc., one of the fastest growing retail supermarket chains, won its argu-

ment before a Federal Trade Commission examiner that it's a meat packer, not a grocer. This being the case, it's subject to regulation by the Agriculture Dept. under the 1921 Packers & Stockyards Act, instead of by FTC.

Food Fair's contentions were based on the fact that it runs a New Jersey packing plant with annual sales of some $25-million. The question came up in the first place while the chain was combating an FTC charge that it was violating antitrust laws by accepting discriminatory allowances from suppliers.

• **Shifting Scene**—The FTC examiner's ruling awaits action by the full commission. But, regardless of the outcome, it constitutes official recognition of Food Fair's claim that it's a packer. And it focuses new attention both on (1) changes inside the food industry, pitting manufacturer against distributor and (2) recent events affecting the industry. The latter include:

• Hearings, starting May 1, by Sen. Joseph C. O'Mahoney (D-Wyo.) on a bill amending the 1921 Packers & Stockyards Act. Under its terms, FTC would regain jurisdiction over the meat industry.

• The continuing investigation of the meat packing industry by Sen. Estes Kefauver (D-Tenn.), as new chairman of the Senate antitrust subcommittee.

• The packers' attempt at modification of the 1920 decree—first effort of such seriousness since 1930.

I. Behind the Decree

Wide fluctuations in meat prices—for which World War I was partly to blame—brought the demands for action against packers to begin with. The giants were accused of combining to monopolize the meat industry through control of distribution facilities—particularly refrigerated branch houses and railroad cars. It was also charged that they owned and operated retail meat markets, stockyard terminal railroads, and market newspapers. What's more, said the FTC, the packers were trying to dominate trade in other food products as well.

The 1920 decree prohibits:

• Ownership of specified distribution facilities.

• Sale of meat, fresh milk, or cream at retail.

• Any dealings in about 140 products, including vegetables, fruit, fish, and groceries in general.

The packers now insist they accepted the ruling only to avoid unfavorable publicity and long legal battles. They want the right to sell at retail, deal in milk and cream, and expand into food lines other than meat.

Whether or not the long-standing decree has anything to do with it, there has been a rush of newcomers into the

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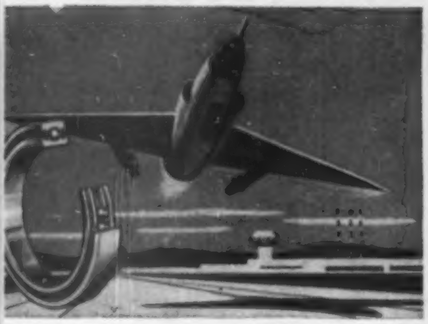
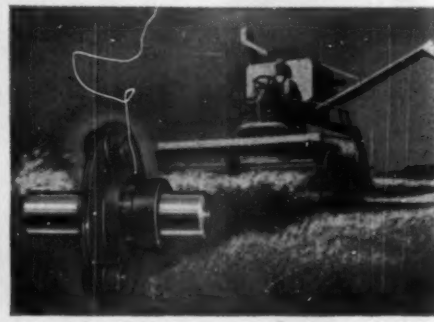
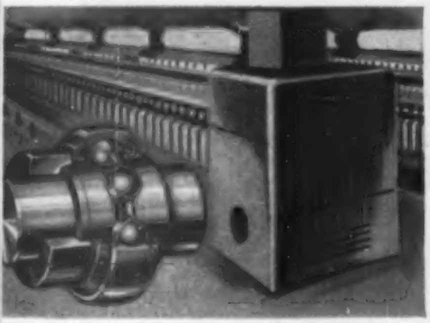


AIRCRAFT . . . On airframes, engines, instruments, accessories, Fafnir design engineering is vital to development.

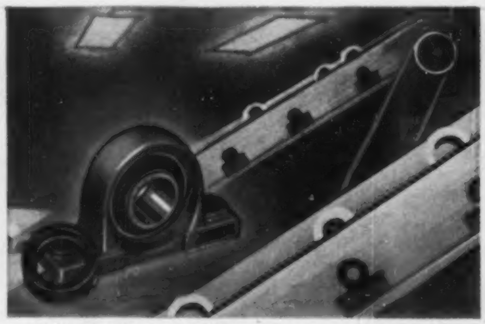
AIR-CONDITIONING . . . Fafnir's "attitude and aptitude" for solving bearing problems help the industry's rapid growth.



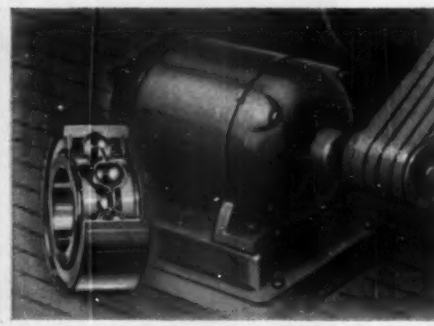
FARM EQUIPMENT . . . Development by Fafnir of easy-to-install bearing units helps to accelerate farm mechanization.



TEXTILES . . . Fafnir sealed and shielded ball bearings and ball bearing units solve many costly spoilage problems.



MATERIALS HANDLING . . . The economy of materials handling equipment is assured by Fafnir low-cost "packaged" units.



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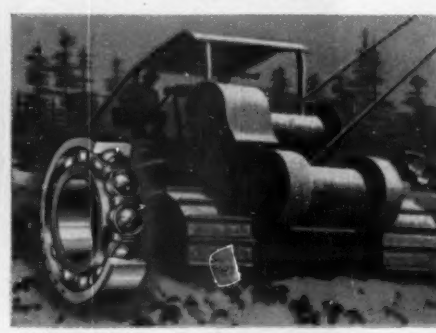
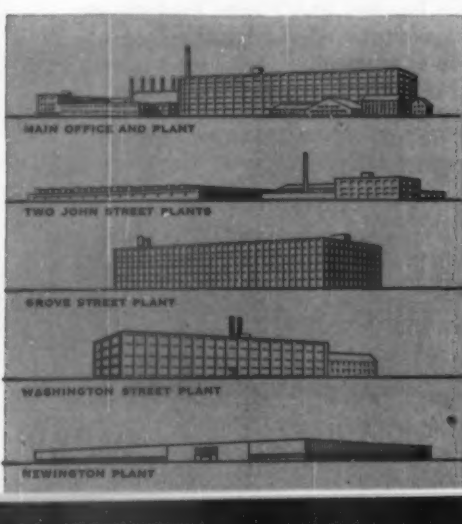


LUMBERING...On heavy equipment, Fafnir is improving efficiency with ball bearings and ball bearing units.



FAFNIR CAN SUPPLY ball bearings in the widest range of types and sizes, in large quantities — not for a limited number of special customers — but for industry-wide consumption. Fafnir is the largest independent manufacturer of precision ball bearings in the U. S. A., with 1,250,000 square feet of manufacturing space, 23 branch offices, 18 warehouses. Worth bearing in mind —The Fafnir Bearing Company, New Britain, Conn.

MOST COMPLETE BALL BEARING LINE IN AMERICA **FAFNIR**

". . . opposition has sprung up from many distributive trade associations . . ."

MEAT PACKERS starts on p. 61

meat packing business in the years since. For instance, Swift says there were only about 1,200 packing plants not affiliated with it in 1929. Today there are some 2,300.

This has sharpened competition. Swift with $2.4-billion in yearly sales and Armour with $2.3-billion still far surpass the others. But Cudahy now trails Morrell and Hormel, and its $291-million in fiscal 1956 sales were only a shade better than Oscar Mayer's. In fact, says Cudahy with some irony, in its present size it can hardly be a threat to anyone.

Packers point to other changes:

- Growth of big retail food chains (they did 75% of the 1955 business).
- Improvements in transportation, particularly in trucking, to give small packers many of the marketing advantages once enjoyed only by the big.
- New ways to handle meats—by canning or freezing, for example.
- Prepackaging of meats, both by wholesalers and retailers.

• **Continued Attack**—However, since 1920, there have been other antitrust assaults by government on the packers. Swift & Co. says, though, that all the suits have been dismissed.

The present effort to modify the 1920 decree isn't likely to be easy. Opposition has sprung up from many distributive trade associations—chief among them the National Retail Grocers Assn., National-American Wholesale Grocers Assn., and Supermarket Institute. The Western States Meat Packers Assn. is also in the enemy's ranks.

II. What's at Issue

The real battle will probably rage over the packers' interest in establishing retail stores. If they did so, present law would place policing duties in Agriculture Dept. hands—and, insists the opposition, the FTC would regulate more strictly. That's one reason why NARGUS favors the change in jurisdiction contained in the O'-Mahoney bill.

• **Brand Trouble**—But whoever the watchdog, retail groups aren't likely to welcome direct competition from packers. In a broad sense, the problem is part of an issue that concerns other industries as well—the growth of merchant or private brands in competition with manufacturer or national brands.

The trend is particularly strong in food. Last week, the Dept. of Agriculture issued a report on the invasion

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of the meat industry by retail chains. Besides Food Fair, the list included 12 others—among them giants such as A&P, Kroger, First National, Safeway—with their own meat packing plants. The same pattern can be observed with many other products.

In fact, says Swift: "Because of modern, large-scale, integrated methods prevalent today in food distribution, the traditional, separate wholesaling and retailing levels have largely disappeared."

• **The Upshot**—As a result, say the packers, it's harder and harder for them to place their brands on crowded supermarket shelves. Said Swift in its petition to the Justice Dept.: "The private brands of large distributor organizations are now causing a decline in the appearance of Swift's brands in many stores, thus preventing the housewives from having wider opportunity to choose Swift's products in competition with other brands."

For example, the packer complains, it can't find an outlet at all in Levittown, Pa., where there is nothing but supermarket chains. In effect, Swift is saying that the big chain—not the manufacturer—is now calling the food industry tune. The chain can compete directly with packer products, and the packers can't fight back.

• **How to Do It**—It still isn't clear, though, just what form the packers' retail operations might take. Swift talks about running experimental retail stores, to bring it experience in retailers' problems. There's also discussion of establishing meat department concessions in smaller groceries, which might give the packer entree in an area from which it had been rebuffed by the bigger boys.

However, it's difficult to envision Swift as a major retailer—although it won't come right out and deny the possibility—if the decree is lifted. At the same time, the current push is in accord with the company's drive toward more brand identification, as a means of improving profit margins (BW—Jun.11 '55,p41).

III. Into Other Fields

The packers want more than the right to sell at retail. They also want relief from the parts of the 1920 decree limiting their line of products.

The decree, says Cudahy, binds it to meat packing and "practically prevents" it from diversifying into more profitable lines, to offset activities in what "has become one of the least profitable of American industries."

However, none of the three big packers involved has said for sure what lines it was considering. Chances are that Swift, for one, would first go more extensively into baby foods. As for

". . . all it really wants, Swift says, is a bigger share of the market . . ."

MEAT PACKERS starts on p. 61

fruits and vegetables, Swift insists management has no plans for all-out effort in those departments. All it really wants, in fact, Swift says, is a bigger share of the market.

• **No Monopoly**—The company says that, under today's conditions, the chances of dominating a market are remote. Its market share in most of the non-meat items it's currently allowed to sell has dropped in recent years: margarine from 17% to 9%, salad oil from 11% to 6%, cheese from 11% to 8%, eggs from 3% to less than 1%, and canned dog food from 9% to 5%.

"Only in peanut butter," says Swift, "has there been an increase of any significance."

• **Viewing in Alarm**—But despite these statistics, the National-American Wholesale Grocers Assn. claims an expansion of product lines would bring "possible effects detrimental to the . . . grocery industry." In its active opposition to the packers, it has sought to become a party to the pending Justice Dept. action.

Apparently, the wholesalers fear, among other things, that the big food processors would compete with them for retailers' business in the new lines, through company-owned branch houses.

Swift counters with the report that it has closed 142 branch houses in the last 26 years, will probably shutter 25 or 30 more this year. In their place, it's distributing more and more products through wholesalers.

• **Status**—So far, the Justice Dept. has taken no official stand on the packers' petitions. A committee appointed by the attorney-general in 1955 to study antitrust laws did recommend, however, that "no distributive pattern should be favored or prejudiced by law." It went on to suggest that consent judgments ought to be modified with changing circumstances.

The packers have met three times with the government. In January, Washington asked for more data, now being assembled. Then more meetings will follow.

Should the outcome favor the packers, it might be a precedent that could lead to reexamining other classic consent decrees—in oil and tobacco—that have been entered as permanent.

Most of the recent decrees—such as that which directed International Business Machines to alter some of its policies—have had time limits of, say, 10 years. **END**

SOUTHERN BARGE TERMINAL—Thousands of feet of tubular material for practically all the major and independent oil companies in the Gulf Coast area are handled here. Said Reuben Albaugh, Vice-President and General Manager, "Take a look at our yard . . . there's plenty of rough work to be done out there every day. That's why we specified *Clarklift*—it's the most stable and rugged, the easiest to handle, the most dependable truck we've ever tried."

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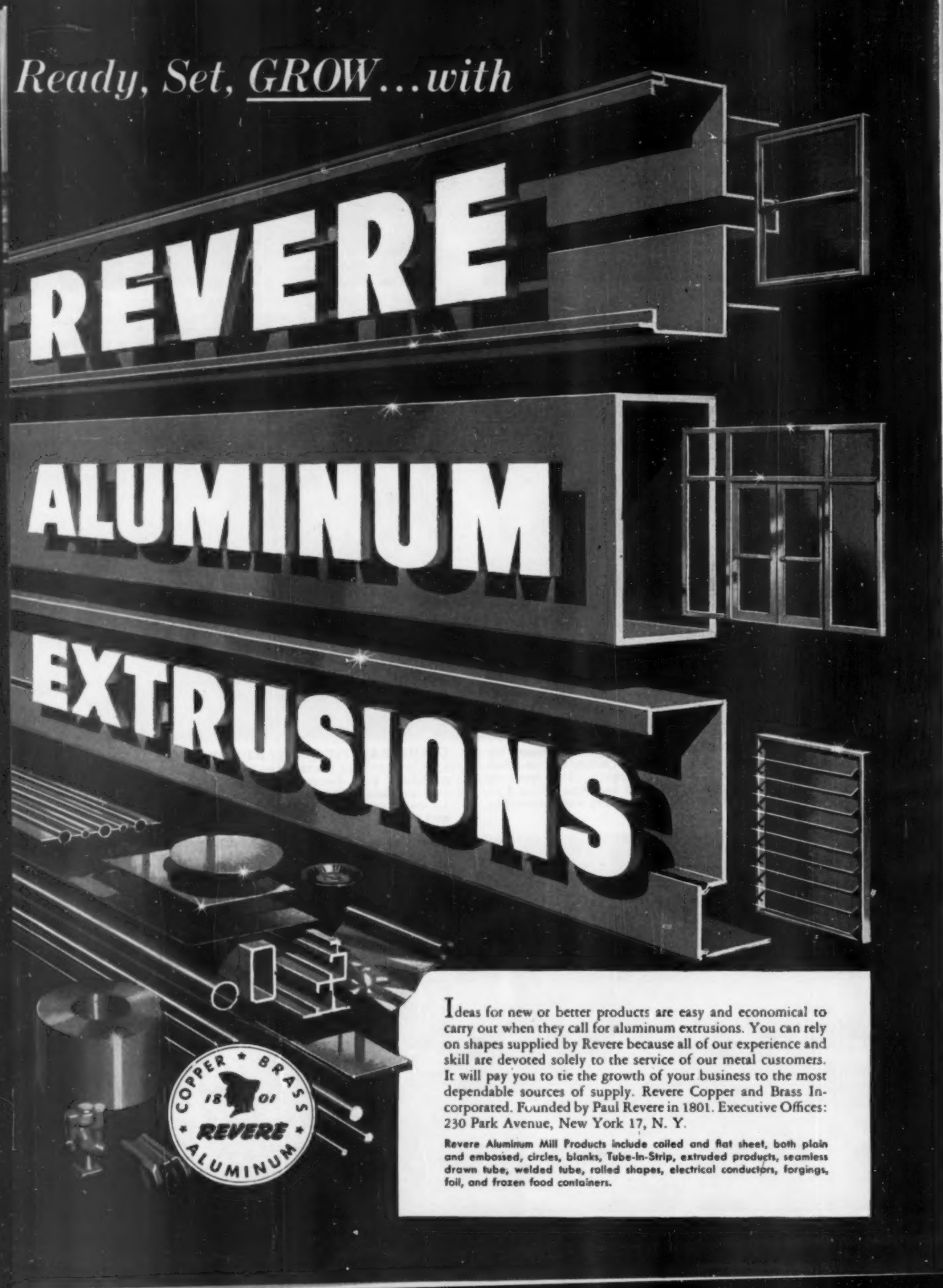
GOODYEAR TIRE AND RUBBER COMPANY—This synthetic rubber plant is the largest in the world. It works a 24-hour day, 7-day week. Put to the test of handling raw materials and supplies at this energetic pace, this LP-gas *Clarklift* ". . . operates under severe conditions, and always operates well."

UVALDE ROCK ASPHALT COMPANY—Here comes another load of asphalt tile ready for shipping. Said management, ". . . we especially like two things about our *Clarklift*—the ease of maintenance and the safety features. We also like the brake that automatically goes on when the driver leaves his seat."



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Scott Banks on Its Distributors

● Paper company decides they're the best bet when it comes to marketing its industrial packaged goods.

● In a new 14-point package, it gives franchised dealers sole distribution rights to these products.

● To butter up the deal, it offers favorable contracts and promises of special incentive sales programs.

Four years ago, what is now Scott Paper Co.'s industrial packaged products division set about to resolve once and for all a basic marketing problem that had plagued the company for years: how best to distribute its line of industrial towels, tissues, and wipers. These products go to factories, office buildings, plant offices, restaurants, service stations.

At a recent meeting of the National Paper Trade Assn. in New York, Scott unfolded the saga of its search for the answer, and its plans for the future. It also outlined its 14-point package, which includes these new features designed to endear the company to its distributors:

- Formal distributor relations policy that says, among other things, that Scott will sell only through distributors.
- A five-year distributor contract for handling Scott's products, to be canceled by the company only for cause, but allowing a distributor to resign on 30 days' notice.
- Establishment of an Industrial Distributor Advisory Service to supplement a Merchants Advisory Committee that Scott created when it decided to bet all the way on distributors.
- Promise of some kind of distributor incentive program beyond the usual sales contests.

• **Earlier Bids**—In addition, Scott already had announced last fall a change in sales terms that gives distributors up to 40 days, rather than the usual 10, in which to take advantage of a 2% cash discount.

Finally, the company has started a localized advertising program to supplement national campaigns. This includes (1) listing all Scott distributors in local classified phone directories; (2) placing ads in regional purchasing agent magazines; and (3) launching a mobile tractor-trailer display of Scott products for a two-year trek around the country.

• **Three Choices**—Scott didn't decide overnight to put all its chips on the franchised dealer. Ordinarily, a company selling to that kind of market—which includes such big customers as, say, a General Motors, and such small ones as a roadside inn—has three choices in how to get its goods from the factory to the ultimate purchaser:

- By direct shipments to the user.
- Through franchised distributors, wholesalers, jobbers, agents—the run of middlemen that make up the distribution service industry.
- By using a mixture of both.

• **Mixture**—Until 1953, it had been Scott's policy for this small division—annual sales between \$20-million and \$30-million—of the \$270-million company to use a mixture of distribution channels. Big accounts were sold direct, smaller ones went through the wholesale paper trade—and there was a constant shifting in the manner in which accounts were served.

This practice hardly rated the name of a policy, since it was established more by lack of decision than by any studied analysis of distribution. Scott did have one rule: No buyer could get a direct factory shipment in less than 25-case lots.

Today, that rule still applies, but it is one of the few resemblances that Scott's present industrial packaged product distribution system has to the days when it was floundering in indecision. In years past, as much as a fourth of the division's output was sold direct. Last year, 91.1% went through distributors. By 1959, the company says, it should be 100%.

• **Far-Reaching**—Viewed from the outside, Scott's decision seems simple: The entire line, regardless of size of account, will eventually be sold through franchised distributors. But the import of that decision goes a lot deeper—both for Scott and for the paper trade industry.

For Scott, it means working entirely through distributors, many of whom until recently viewed the company with suspicion, if not outright hostility. The company had no distributor organization as such, belonged to no trade groups. "We were a suspected supplier," says Vice-Pres. G. Willing Pepper, head of the whole industrial products group, and the man who gets the credit for forcing the problem through to a definite policy.

For the distributors, it means that one of the leading competitors in this industrial marketing field—including Brown Co., Crown Zellerbach Corp., Fort Howard Paper Co., and Bay West Paper Co.—has deliberately chosen the often-harassed middleman as the foundation for its marketing strategy.

• **Three Years of Research**—Behind Scott's sweetened-up distributor package—which puts the company in the position of meeting the key recommendations of the paper trade's research council—are three years of surveys, experiments, test marketing, and distributor analyses, some of which are still going on.

In 1953, it wasn't at all clear whether the company should continue as it was—selling part direct, part indirect—or shift entirely to one way or the other. One thing was clear, though. On the strength of Scott's brand name and production facilities, it could easily compete for major accounts by direct shipment. But there is a myriad of smaller customers that only distributors can reach.

Scott's policy of sometimes selling direct always posed a threat to those distributors. When a house built up a customer to become a carload lot buyer, it never could be sure that the factory wouldn't take over the business.

That's a chronic complaint of just about all distributors—whether in industrial or consumer products. It meant that Scott not only had difficulty getting into some markets because some distributors—including the largest in the business—wouldn't handle its line. It also meant that some distributors felt no great urge to push Scott products—especially since they took up lots of space and were relatively small in dollar volume.

• **Turkey**—Scott's first attempt to come up with a firm policy was to set up its own direct factory distribution system. In 1954, it opened warehouses in Flint, Mich., and Schenectady, N. Y. According to one Scott executive: "That was just one of our turkeys."

The experiment convinced the company that, with its type of product line and market, it had no chance to sell entirely direct. It would need at least 77 major warehouses around the country, plus a host of auxiliary storage depots. Administering such an organization "would have tied us in knots," says Fred L. Witt, manager of the industrial planning department.

The alternative was a vigorous distributor organization that could count on factory support.

In 1954, Scott determined to concentrate on building distributor good will and establishing its name in the trade. It started participating in NPTA

sessions, conducted a distributor attitude survey, set up the Merchants Advisory Committee, and began a full-scale program to learn the distributors' problems—and weaknesses.

• **Second Try**—This investigation led to Scott's second major experiment. Using top-flight sales and marketing people from headquarters, it took over the paper department of a Binghamton (N. Y.) maintenance supply wholesaler.

For a year and a half, the Scott crew laced the city, selling its own and other products. It surveyed 85% of the town to uncover the market potential. From this research—and similar tests in Indianapolis—the company reached these conclusions:

• The distributor, who handles hundreds of items, has a much more complex problem than does the factory.

• Scott products weren't just competing against somebody else's towels—they were really competing for the time and effort of the distributor and his salesmen.

• A supplier must offer a distributor a line broad enough to make alternative sales possible.

On this point, the Scott division was able to win an internal company argument. It had wanted to offer more than one towel, one tissue, one industrial wiper. In Binghamton, it was able quietly to introduce new products—different folds for towels, for instance—and to gain ammunition for a broader line, on which it now has the go-ahead.

• **Accountants' Study**—Besides the Binghamton experiment, Scott hired Price, Waterhouse, a New York accounting firm, to make a complete study of an entire three-month operation of distributors in Chicago, New York, and Minneapolis.

That study, which stemmed from the initial Merchants Advisory Committee meetings, convinced Scott that distributors' complaints were legitimate: Margins were too low. It also uncovered the fact that distributors often didn't know their true costs, were failing to abide by Scott's suggested resale price lists, and could stand better shipment practices. One distributor was selling a customer in two-case lots but charging him at the 50-case rate. He was losing 19¢ on each dollar for this service.

Still, Scott acted on Price, Waterhouse's recommendation. The company adjusted its own prices upward and lifted the average markup 2%, except for wipers.

• **Results**—At the March NTPA meeting, Scott announced results of its latest attempts, since it had decided to live with distributors and like it, to help them solve their problems.

Frank Federici, head of Associated Industrial Consultants, reported on a study of some 100 of Scott's 800-odd distributors. Essentially, he was look-

". . . just as important, Scott's experience has given it a fresh look at its own marketing problems . . ."

STORY starts on p. 73

ing for cost leaks. His prime conclusion—along with a lot of specific recommendations and rules-of-thumb for improving operating efficiencies—was: "The average house, by refinement of organization and more effective use of office labor, could increase its profit 20% to 40%—a few as much as 75%."

• **Fresh Look**—All of this research and experimentation has helped Scott in its distributor relations and by no means was it incidental. But, just as important, Scott's experience has given it a fresh look at its own marketing problems, as well as those of the distributors on which the company has now staked its growth.

For instance, Scott is winding up a Chicago test—due for final evaluation in May—of what it calls its Redistribution Plan. This system is designed to eliminate less-than-carload lot shipments to major distribution centers. Scott picked four master distributors—those who order all of its line in carload lots—to serve the smaller distributors who otherwise would have to pay premium transportation costs.

The master distributors add an extra percentage to the factory price in billing smaller distributors and, in addition, get a rebate from the factory for acting more or less as Scott's agent in the area. Under this system, Scott has dropped the number of shipping points in Chicago from 79 to 18—the four master distributors plus others who buy only a limited number of Scott products in carload lots.

Among other things, the plan is designed to:

• Establish what amounts to a quantity discount policy for big, full-line buyers based on a particular service rendered.

• Give Scott's distributors—many of whom have been unable to service a host of small customers because of inventory and storage problems—a chance to tap new markets. They can call on quick shipments from master distributor inventories.

• Reduces Scott's own transportation problems.

Not everything, of course, that Scott has done has worked out neatly. At one point, for instance, it took its first crack at an incentive system for distributors in a couple of cities. Sales actually decreased. Despite this, according to Scott, the distributors appreciated what the company was trying to do. END

In Marketing

• • •

Tea Trade Cooks Up Automatic Brewer To Insure Quality in Restaurants

The tea industry is on the warpath to get a bigger share of the market. To prove it's earnest, this week it took the wraps off what it calls the first automatic teamaker, designed for institutional use (picture).

The Tea Maker was developed by Food Machinery & Chemical Corp., with the blessing of the Tea Council of U.S.A., Inc., and the National Restaurant Assn. In working at the equipment, the industry had its eye on discouraging figures like these:

Though the U.S. is second only to Britain as a tea consumer, the trend to tea-drinking here has been steadily down in the past few years. Tea sales rose from 84-million lb. in 1948 to 112-million lb. in 1954; however, Tea Council reports that by 1956 they had slipped to 105.9-million lb.

Marketing studies by Elmo Roper turned up the fact that people drink only half as much tea when eating out as they drink at home. The surveyors concluded that a major reason was that there just wasn't adequate tea-brewing equipment to brew a uniformly good cup of tea. Some four years later, the new machine is now ready for the market.

In test restaurants, Food Machinery says the automatic teamaker cut serving time anywhere from 5 seconds to 12 seconds from the time required for tea bag service. Since the amount of tea per serving and the temperature of the water are controlled—for both cup and pot service—you get the same tea every time. During a 60-day trial, hot tea sales in one restaurant reportedly jumped 125%, iced tea (which the machine also serves), 34%. Food Machinery will distribute the teamaker; its price: $850.

• • •

1956 Sales and Profits Rose Minutely In Department and Specialty Stores

Department and specialty stores picked up both sales and profits in 1956.

This was the report from the Controllers' Congress of National Retail Dry Goods Assn., released this week.

To be sure, the gains were minute. Profits after federal income taxes came to 2.4% of total sales—up 0.1% from 1955. Sales averaged 3% higher than 1955's peak—but higher prices accounted for much of this gain, along with the fact that consumers were of a mind to trade up. Average sale of $4.75 was 14% higher than in the preceding year.

Cumulative markons—the ratio of accumulated dollar markup to the accumulated retail price—inched up a 0.1% notch, to 39.4%. Since markdowns and shortages held steady, gross margins—or the difference between sales and the cost of merchandise sold—also netted a small gain.

There were discouraging elements in the NRDGA picture. Operating expenses hit a new peak of 34% of sales—up 0.4%. Specialty stores and stores selling less than $1-million a year were hardest hit. **So, though total profit gained a bit, profits from merchandising operations fell—from 2.9% to 2.6%.** It was only "miscellaneous income"—from leased departments, service charges, carrying charges on deferred payment accounts, and the like, that pulled profit up.

Taking the higher prices into consideration, inventories were down to levels generally corresponding with those of January, 1956.

Commenting on the report, Sam Flanel, manager of Controllers' Congress, pointed to higher payroll costs, reaching a peak of 18.5% of sales, as a major hazard to greater profits.

• • •

Another Court O.K.'s Exclusive Dealing In Auto Business; Boycott Cases Remain

Exclusive dealing in the car business won another round last week.

A U.S. Court of Appeals in Washington, D. C., ruled that a car manufacturer that wants to give an exclusive franchise to one of its dealers may cancel the franchises of other competing dealers in the same area. This ruling, involving Studebaker-Packard dealers in Baltimore, reversed a lower court decision. It was one of several cases that erupted during the 1955 dealer revolt (BW—Aug.27'55,p76).

Detroit would have been startled had the lower court's findings held; the upper courts have consistently upheld the car makers on franchises. Another 1955 case, involving Ford, went the same way in recent weeks.

The cases Detroit really has its eye on are still pending. These involve dealers in Philadelphia and Hartford. The dealers bought new cars, sold them as used. They charge that a boycott prevented them from buying new cars. A verdict for these dealers, Detroit feels, would cut to the basic issue: Can a manufacturer refuse to supply a customer who can afford to pay?

• • •

Marketing Briefs

National advertisers spent a record $373,996,000 in newspapers in 1956, a 6.1% increase over 1955, says Media Records, Inc., in its report to the Bureau of Advertising of American Newspaper Publishers Assn. Gains in most categories offset an 8.6% dip in automotive.

Sears Acceptance Corp., subsidiary of the giant retailer, in its first annual report showed that its **receivables due from customers** amounted to $959.5-million in 1956—or 44% of total Sears sales. Since Sears' sales grow by about $250-million a year, credit extended will easily top $1-billion in 1957.

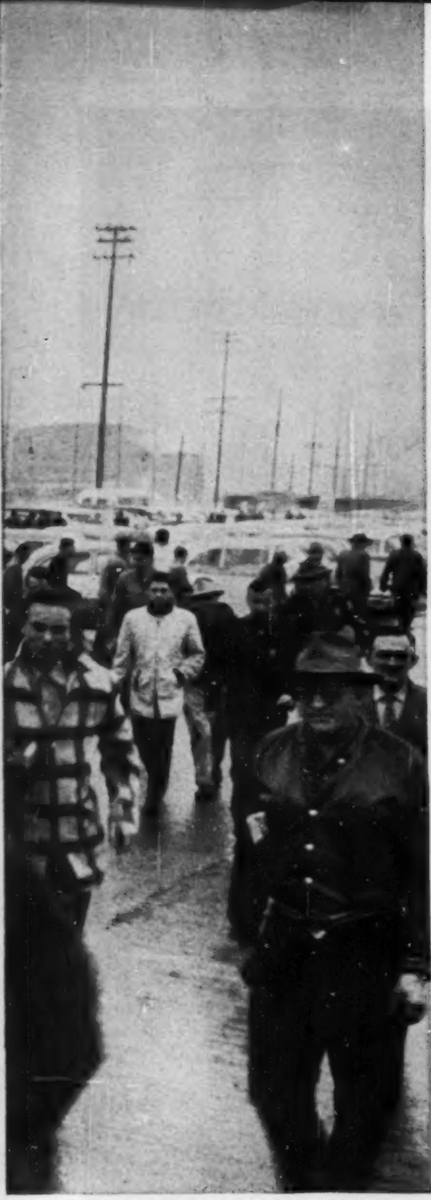
SHIFT CHANGE sends some of Boeing's 56,700 Seattle area workers streaming toward home. The company now employs 57% of

One-Industry Town—Population

Metropolitan Seattle thinks it's dangerously dependent on Boeing Airplane Co.—one of whose jets soars over the city at left.

EVERY WEEK of the year, the 56,700 metropolitan Seattle employees of Boeing Airplane Co.—some of whom appear in these pictures—haul home a paycheck bonanza totaling almost $6-million. This deluge of dollars buoys up Seattle retail sales, the market for new homes, and service industries employing additional thousands.

Almost any city would regard a payroll of such size as grounds for joy unconfined. But not so Seattle. Its



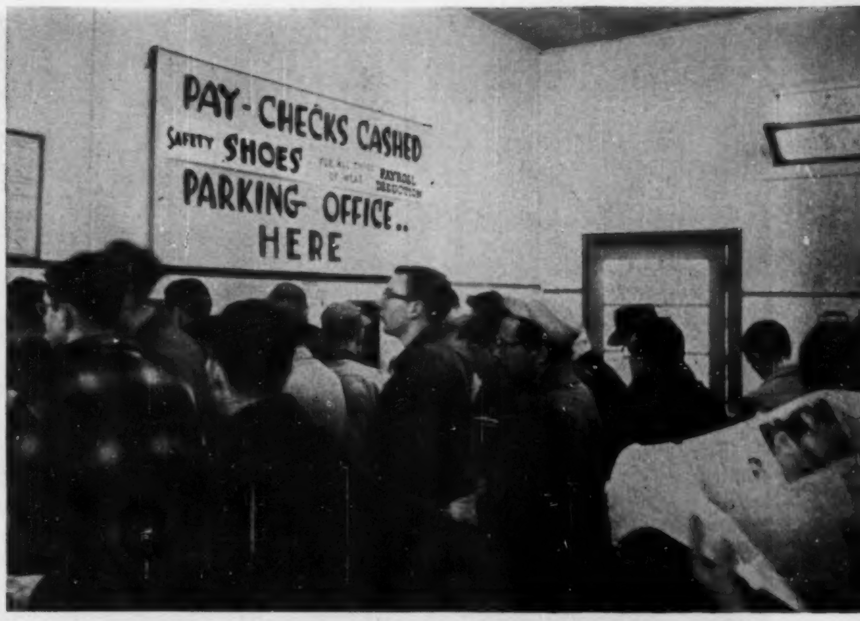
area's manufacturing labor force.

785,000

civic leaders are far from wishing Boeing on its way, but they still worry over how one industry dominates the town.

What, exactly, is wrong with the picture? The answer can be contained in a single statistic: In a metropolitan area with 785,000 population, Boeing is paymaster to a whopping 57% of total manufacturing employment. As Boeing goes, so goes Seattle, willy-nilly. So far, with one brief postwar exception, Boeing's health has been fine, and so has Seattle's. But with so much dependent on defense spending for aircraft, Seattle is wary of the future.

• **Straw in the Wind?**—Last week, in fact, the Air Force gave the city some-



PAYROLL every week at Boeing tots up to almost $6-million, a transfusion of cash that has kept Seattle in economic health despite declines in the state's traditional lumber industry.

DEALERS in tools for aircraft workers are among the thousands in service industries supported by the Boeing bonanza. Any cutback in plane building threatens their business.

BUSES bound for Boeing plant are frequent Seattle sight; thousands drive their own cars.

thing tangible to brood about. It announced a slowdown in production goals for Boeing's B-52 bombers and KC-135 tankers—from 20 to 15 a month each. Since current production is less than 15 anyway, the decision can't cause much trouble until the planned 11 heavy bomber wings are fully equipped. But any talk of cutbacks is ominous in Seattle.

The situation is stimulating action on two fronts:

• Seattle, aware that the Boeing feast has caused a famine of other new employment, is out to find new sites for industries and plants to occupy them.

• Boeing, for its own sake as well as Seattle's, is doing its best to diversify defense output and enlarge commercial production of passenger planes.

I. Century of Progress

Until fairly recently, aircraft was dwarfed by the trinity of industries on which Seattle grew up—fish, farms, and forests, especially forests. On that diet, the city boomed in 100 years from a tiny settlement to 20th among U.S. metropolitan areas in population.

Before World War II, lumber and wood products provided 47% of Washington state's manufacturing jobs, pulp and paper another 8%. But since then, the fir lumber industry has shifted south to center in Oregon. With more and more emphasis on aircraft, the figures have reversed—by last February, lumber and wood products provided only 21% of the jobs, and aircraft, mostly Boeing, 27%.

This is on a statewide basis. In the Seattle area, aircraft's share of manufacturing employment climbed from 16% in 1950 to February's 57%. What's more, Boeing supplies almost 18% of all non-farm jobs in the area. The trend is still up. Last year, the Boeing payroll surged 17,000, at a rate faster than any other major Seattle employer. And the spree is still on.

• **Spreading Out**—Boeing's big plants are concentrated in Seattle and neighboring Renton. But it employs 800 at a flight center at Moses Lake, in central Washington, and will soon add 200 to 400 more there. Boeing is also spreading into Everett, 30 mi. north of Seattle, and one of its longtime subcontractors—Rohr Aircraft Corp. of Chula Vista, Calif.—has just opened a 400-man plant at Auburn, a short distance south of Seattle.

Boeing's payroll is far from its only impact on the region. Of the 56,700 employees, more than 7,000 are engineers, physicists, mathematicians, and the like, all in higher pay brackets and all exerting economic and social influences of their own. Moreover, the company's capital expansion program is the biggest of any Pacific Northwest industry, and by renting 1.5-million sq. ft. of warehouse space, it's important to landlords.

• **Pentagon View**—This dominance of one area by an important defense contractor isn't a matter of indifference to the Pentagon. But, says one Defense Dept. official: "We don't regard our primary mission to be to give advice on social problems."

As a matter of fact, Defense and the Federal Civil Defense Administration have one policy that can aggravate the problem: encouraging the dispersal of industry. Usually, the dispersal is into a smaller outlying community, where the newcomer is much more apt to dominate. The Air Force established Boeing in a government-owned bomber plant in Wichita on the dispersal theory, but in smaller Wichita, Boeing's domination

Data: Bureau of Employment Security, Washington State. ©BUSINESS WEEK

of the labor market isn't any less than in Seattle.

Still, the military does acknowledge shortcomings in a situation such as Seattle's. If production were temporarily halted, there would be few other industries to absorb the surplus workers, and the men might seek work somewhere else. Then, when it came time to rehire, the trained force would have vanished.

II. Behind Boeing's Boom

Men have been building planes for Boeing in Seattle ever since World War I. Bill Boeing, Seattleite son of a wealthy lumberman, began toying with flying machines in 1915. Because he didn't like any of the airplanes then on the market, he helped design a seaplane, and in 1916 founded what was to become Boeing Airplane Co.

In the years since then, Boeing's engineering staff has produced the world's first plane with a pressurized cabin, first military jet transport, and first commercial jet. The company's diversified program now includes:

- The B-52 jet heavy bomber—biggest Boeing item at present.
- The KC-135 jet tanker, also for the military.
- The Boeing 707 commercial jet transport.
- Bomarc guided missiles—not yet in production.
- The Boeing gas turbine engine.
- A chemical supersonic bomber or transport—still in research.

This wide range of products is a healthy contrast to 1945, when Boeing was making nothing but B-29 bomb-

". . . Boeing prizes civilian business for its steadiness . . ."

SEATTLE starts on p. 80

ers. Or, for that matter, to 1950 when the roster listed only Stratocruisers, B-50 bombers, and C-97 tankers.

• **Nagging Worries**—Still, diversification doesn't guarantee the kind of stability Boeing is after. The latest Air Force decision on the B-52—even though it only stretches out an existing program over a longer period of time—raises fears of what might happen if defense appropriations were really slashed. Fortunately, Boeing now has a two-year B-52 backlog, and it will probably be at work on current commitments through the end of 1959. The question is what will happen then. Washington's Sen. Henry M. Jackson says the "real importance" of the Air Force announcement is that it doesn't intend to order any more B-52s than are now scheduled.

As for the KC-135 tanker, it has just gone into production. But since the jet tanker is important to the jet bomber, Boeing is optimistic.

The Bomarc ground-to-air missile is another instance of a Boeing program that posed questions to Seattle, at least when it began. There was talk of dispersing the Bomarcs to Denver, Salt Lake City, or San Francisco. In the end, though, the Air Force directed Boeing to do the job in Seattle, with a former Ford plant to supplement the facilities it had already. This solution obviated building new plants. The question won't be finally answered, however, until Boeing finishes negotiating a Bomarc production contract.

• **In Civilian Clothes**—A backlog of military orders is some comfort. But Boeing prizes civilian business for its steadiness.

Before World War II, the company built the four-engine 307 Stratoliner transport, first plane with a pressurized cabin. With the B-17 design as a base, Boeing turned out nine of them, all still flying. At almost the same time, it came up with a four-engine seaplane, the Flying Clipper, of which 12 were manufactured before the war turned all Boeing's energies to bombers.

In the meantime, Douglas Aircraft Co. was getting the edge on Boeing in the transport business. All through the war, Douglas continued turning out the DC-4 and laying groundwork for the later DC-6 and DC-7.

When the war ended, Boeing retained its work force by concentrating on the Stratocruiser, but after dropping $14-million on the venture, it gave up. By that time, the Korean war was in

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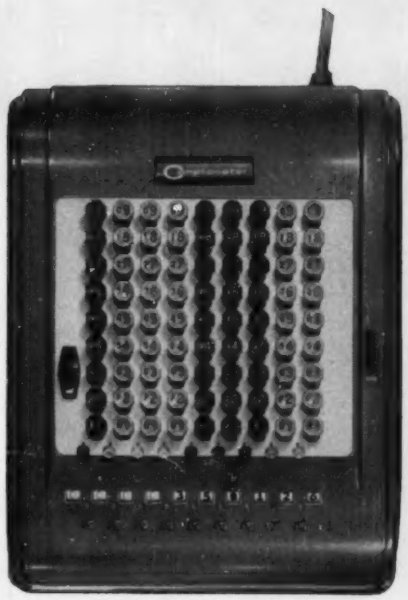

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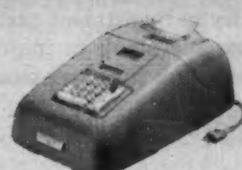

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progress anyway, and Boeing found it hard to mix the production of Stratocruisers with B-50s and C-97s.

• **Whoosh**—Then the jet age was upon Boeing and Seattle. The company's first B-47 had appeared in 1947. Since Douglas was in the lead with sales of piston-engine planes to commercial airlines, Boeing decided to leapfrog into jets and gambled $15-million on the 707's prototype. The result: The 707 has now been flying two years, and Boeing is far ahead of Douglas' competitive DC-8 program. With 141 orders for the 707 to 122 for the DC-8, Boeing is purring.

As a matter of fact, 23% of Boeing's backlog is in 707 orders—exempt from the whims of Congress or the Pentagon. Boeing is so bullish about the jets that it predicts 600 orders—shared with Douglas—by 1960.

• **Crystal Ball**—This kind of prosperity would mean more expansion. But Boeing, mindful of Seattle's dilemma, is trying not to expand too quickly there. For one thing, it subcontracts 35% or 40% of the 707 and KC-135 (by weight), mainly in California.

In the last year, while Boeing has been adding 17,000 workers, other manufacturing employment in Washington state has been virtually at a standstill—jobs increased by only 200. And although it's such a delicate issue that Boeing hesitates to comment officially, it's likely that the company will be employing 60,000 in the Seattle metropolitan area and Moses Lake by yearend.

"Boeing has to be big," says Pres. William M. Allen. "If it isn't big, it isn't in business." This is because the design and manufacture of airplanes is so complicated.

• **Common Interests**—The problem, of course, is that so much of this vast force is in Seattle. Boeing's treasurer, Evan M. Nelsen, is well aware of the need for doing something about it. Last year he told an audience: "All of us must work for expansion and diversification of our industrial base . . . we at Boeing would certainly recommend greater diversification of industry in the state of Washington."

At the same time, Allen sums up the situation this way: "Seattle does not want to be without Boeing, and Boeing does not want to be without Seattle."

III. Courting New Industry

For Seattle's part, the city thinks it's time for action. Everything has been fine so far. Boeing has insulated Seattle from injuries suffered elsewhere in the Northwest when lumber slumped. But can it last?

Mayor Gordon S. Clinton, elected a year ago, recognized the problem by appointing an eight-man committee to study Seattle's plight. The committee—

man-on-the-spot

in Paris

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". . . twice in the past, however, Seattle's businessmen did rally . . ."

SEATTLE starts on p. 80

headed by Miner H. Baker, vice-president and economist at the Seattle-First National Bank—reported back in February. Some of its findings:

"Seattle's future is in the balance. Increasingly the city is becoming a one-industry town. Apart from the aircraft manufacturing industry, we are experiencing insufficient industrial growth to support even our natural increase in population . . .

"The greatest single handicap to industrial progress appears to be the complacency and divided sentiment of our own citizens."

The report contrasted Seattle's attitude to that in Tacoma, its rival to the south, which has suffered reverses such as the loss of important sawmills and now appreciates industry.

• **Let's Do It**—Twice in the past, however, Seattle's businessmen did rally, if only to keep Boeing busy—in 1945, when military work halted, and again in 1949, when the Air Force proposed dispersing B-47 manufacture.

Now they're trying another tack. The Seattle Chamber of Commerce and Port of Seattle have jointly created the Seattle Industrial Expansion Assn., with chamber staff and port funds. It's supposed to promote new industry, but—as the Baker report noted critically—it's scarcely under way. Last week, the first meeting was held.

• **Legislative Help**—Washington's State Legislature has passed an enabling act authorizing the port district to levy a 2-mill tax, which would raise nearly $2-million a year for development of waterfront industrial sites. In the six years to which the authority was limited (at the request of Boeing, which would have to pay $60,000 annually), the levy might bring in a total of $15-million, what with increasing valuations.

The money will come in handy. Most of Seattle's few good industrial sites are small and costly. To improve the situation, the plan is to straighten and deepen the Duwamish River, which flows past Boeing's plants into the Seattle harbor, and open its banks to more industry.

The legislature showed its concern with the state's rate of industrial growth in another way. It established a Dept. of Commerce & Economic Development to take over industrial promotion from a small-scale governor's committee.

The new department, to which tourism and research were assigned as well, drew a $1.5-million biennial appropriation, but so far it's only on paper. END

Two Ways to More Efficiency in

AUTOMATION is in vogue at Delco Radio Div. of General Motors Corp., where this 46-station machine whirls along with little human supervision.

You can either go all-out on mechanizing assembly, as Delco (left) has done, or combine more parts in pre-assemblies, as Motorola (right) has done. Both ways work.

EACH of the assembly lines in the pictures makes a similar product—automobile radio chassis in one case, small portable radios in the other—and each goes as far toward mechanized production as its management people care to go.

• In the picture at the left, Delco Radio Div. of General Motors Corp. uses a Dynasert machine, built by United Shoe Machinery Corp., to perform 46 successive assembly tasks without the aid of human hand. Mechanical fingers insert wire leads of resistors and capacitors and make other connections on printed circuit boards. The parts for assembly are automatically fed to the stations where the work is done.

• In the picture at the right, Motorola, Inc., runs a semimechanized assembly line. Its radio sets are also based on printed circuit boards, but women install the additional parts. There's a trick in this, though: Motorola pre-assembles packages of resistors and capacitors, so the workers can install a dozen or so at a time.

Both methods have their supporters among electronics production men. And both companies claim to be happy with their ways of doing things.

Delco makes car radios for parent General Motors and for Studebaker-Packard Corp.; Motorola makes them for Ford Motor Co. and also its own line of radio and television sets.

• **By Comparison**—To the glance, Delco's 46-station mechanical monster represents a peak in automatic production, while Motorola's woman-manned assembly line stands for the old fashioned way. But not all the advantages and disadvantages of either method can be seen at a glance, and even the experts argue over which is better.

Motorola concentrates on pre-assembly of the parts that must be added to the basic printed circuit. This offers three direct advantages, the company claims:

• A dozen or more components can be hooked up at one motion, where a machine would have to go through a dozen or more separate steps. Machines aren't yet adapted to install pre-assembled components economically.

• The circuit design can be more

Assembling Small Radios

compact than where machines install the small parts. This saves on "real estate," the nonessential area of printed circuit boards.

• Product design can be changed readily without retooling long, complex lines of interlocking machinery.

On the other hand, Delco's route to automatic assembly has been followed by several other major manufacturers, including RCA and Philco. It has obvious advantages for high-volume production runs.

Delco operates two 40-head machines as well as the 46-head machine in the picture. This mechanized assembly has a limited repertoire—the machines are best at the elementary, repetitive, but essential job of inserting lead wires and connectors. All the machine operators have to do is select the heads that are needed for a given model, program the machine, and see that the automatic feed is supplied with parts.

A special machine developed by Delco inspects the completed boards as they go down the line. If it detects three consecutive errors by any insertion head, it stops the line.

I. The Printed Circuit

Both Motorola's and Delco's degrees of mechanization on the assembly line are made possible by the same thing—the printed circuit. Since the war, this has been the greatest step toward simplifying electronics production.

In the last three years, major manufacturers have shifted from using virtually no printed circuits to using at least some in nearly every consumer product. RCA and Philco television sets use up to five printed circuits in each set, and practically every clock radio and portable radio uses at least one.

• **What It Is**—The printed circuit board is generally a $\frac{1}{16}$-in. laminate of paper and phenolic plastic, bonded to copper foil. The wiring circuit is printed on the copper; then the rest of the foil is etched away. The result is a wiring pattern that replaces the spaghetti mass of wiring in the conventional radio chassis.

Printed wiring has one drawback—higher cost of materials. Per square inch, copper-clad laminate is more expensive than the old metal chassis. And the tube sockets, resistors, capacitors, and other components that must be added to the circuit must be more accurately dimensioned and, in some cases, specially designed for printed circuits.

Thus, the manufacturer who uses

HAND ASSEMBLY is favored at Motorola, Inc., where the number of parts to be assembled is reduced by pre-assembly of small components.

PRE-ASSEMBLIES at top are made by Erie Resistor Corp., at bottom by GE. Also shown, GE's lead-less capacitors.

printed wiring must make up the extra cost by savings of labor in assembly, such as by concentrating soldering operations into one dip in a solder bath after all parts are assembled.

• **Ways to Save**—Both Delco and Motorola use printed circuits, though Motorola's is electroplated on the laminate after going through the etching process.

The companies differ on the question of how much hand labor can then be replaced by machinery.

Delco goes all the way. Its three assembly machines eliminate 40 to 46 hand-assembly steps and decrease the chance of human error. But they are costly—up to $250,000 each—and they require slightly greater printed circuit area, to provide clearance for mechanical heads that insert small parts.

Motorola seeks its savings in the preassembly technique, in the smaller area of circuit board that's needed, in mechanizing its soldering operations. In one radio, it has cut the number of parts by one-third.

For soldering, Motorola has installed a big machine that it calls a "lazy susan," which solders 140 connections on circuit boards in 7 sec., replacing 30 hand soldering stations.

II. Pre-Assembly

Motorola reduces the number of parts to be assembled by (1) using one component to do the work of several or (2) prepackaging several components as one unit to be installed.

In the first instance, Motorola equips its portable radios with a power transis-

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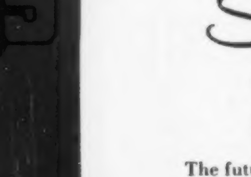
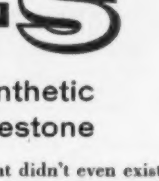
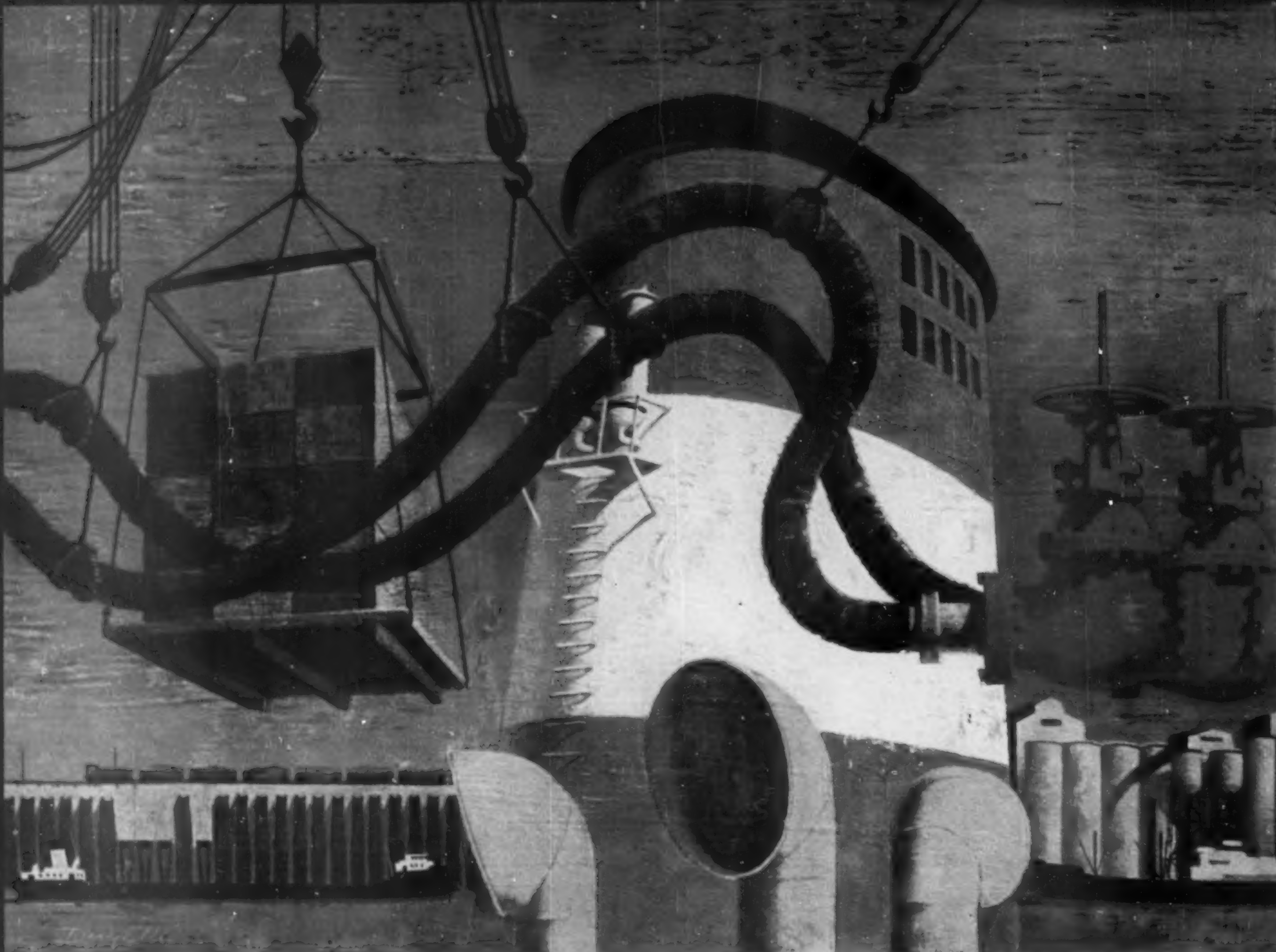


Firestone

BEST IN RUBBER





New sea titans strengthen industry's lifelines

Bank loans help launch bigger, faster, more efficient cargo ships

Industry today needs ships — more and better ships — to maintain the economy of the free world. The volume of goods entering U.S. ports has nearly tripled since 1947. As a result, not all the new ocean giants are luxury liners — many are hard-working merchantmen.

A new supertanker displaces more water than the S.S. United States . . . carries enough gasoline to fill the tanks of 2,000,000 cars. Other tankers carry chemicals, orange juice, and wet wood pulp. Super carriers load enough iron ore to make steel for an entire skyscraper; bauxite and gypsum move in specially designed dry-cargo ships, and "roll-on, roll-off" carriers transport full-length trains and trailer trucks. Even more powerful, faster ships are promised as atomic power is developed.

The sailing ship was queen of the seas in 1812, when First National City began banking the shipping industry. Since then, the Bank has developed a keen understanding of the financial problems of shippers, ship owners, builders, operators, brokers, and charterers.

This experience is valuable in helping these men plan their financial programs today. The current shipping boom is taxing the construction facilities of the world's shipyards and is straining the financing facilities of those institutions all over the world which have traditionally handled the industry's needs.

With 70 Branches, Offices, and Affiliates overseas — including units in London, Paris, Liberia, and Panama—First National City is uniquely situated to meet the foreign currency needs of the industry. The Bank's on-the-spot locations are staffed with American-trained bankers familiar with the business requirements of the shipping industry and with local laws and customs.

To learn the advantages of having a *banker* instead of just a bank account, come to First National City.

The **FIRST**
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". . . manufacturers would have to do one of two things —both expensive . . ."

STORY starts on p. 92

tor that replaces a tube and three capacitors, plus their connectors.

In the second type of parts consolidation, it uses a pagoda-shaped pre-assembly, called a res-cap (for resistor-capacitor), that molds five components into one. In fact, the res-cap eliminates the handling of 13 parts. It costs more, but it can be economically and accurately tested before final assembly; fewer parts have to be installed by hand, reducing error. So it winds up saving about half a cent over hand installation of separate components.

• **Baffling the Machines**—The next step, it would seem, would be to combine Motorola's pre-assembly technique with Delco's mechanized installation system—to put pre-assembled components in place on the circuit boards. But it isn't so easy.

The assembly machines can take the two or four lead wires of a small component, bend them down, and push them in place, but pre-assembled components have up to 10 connecting pins or lead wires. These connections are easy to make by hand, but they baffle most machines.

For machine installations, manufacturers would have to do one of two things—both expensive. Either they would have to build highly specialized tools that can straighten out all the leads on a pre-assembly and space them perfectly before poking them into the proper holes, or they would have to make or buy pre-assembled units that meet precision tolerances.

Meanwhile, Motorola is happy with having to insert only 28 components in the circuit board before its "lazy susan" soldering machine takes over.

III. How Much Flexibility?

Motorola engineers raise questions about the reliability of the assembly machines, and about how much they freeze the product design and manufacturing process.

Machines with a limited number of assembly operations are practical, says Motorola, only if they will operate unfailingly, since the whole line stops if one insertion head fails. Moreover, the units that are being installed may be at fault even if the tools are mechanically perfect. Tangled or bent leads, wires that are off center, or other relatively minor deviations can shut down a mechanical assembly line.

Even if each production head is 99.8% reliable, Motorola engineers say,

". . . Delco can well count its chickens before they're hatched . . ."

STORY starts on p. 92

the statistical possibility exists that a machine with 50 insertion heads would be down all the time.

• **Delco Defense**—Delco people reply that insertion heads are more reliable than that. They say their three machines are in operation about 85% of the time, and their 46-station machine operates as reliably as those with 40 heads.

Delco estimates that the machines save half a cent per board over hand assembly, though some of the saving in direct labor cost is absorbed by additional cost of packaging, material, and higher quality in the components.

• **Design Frozen?**—Delco concedes that purchase of an assembly machine more or less freezes design until the product pays for the special heads and the set-up time involved. But Delco says it wouldn't buy a machine unless the volume was in sight to justify the investment. With a good share of the automobile radio market virtually guaranteed, Delco can well count its chickens before they're hatched.

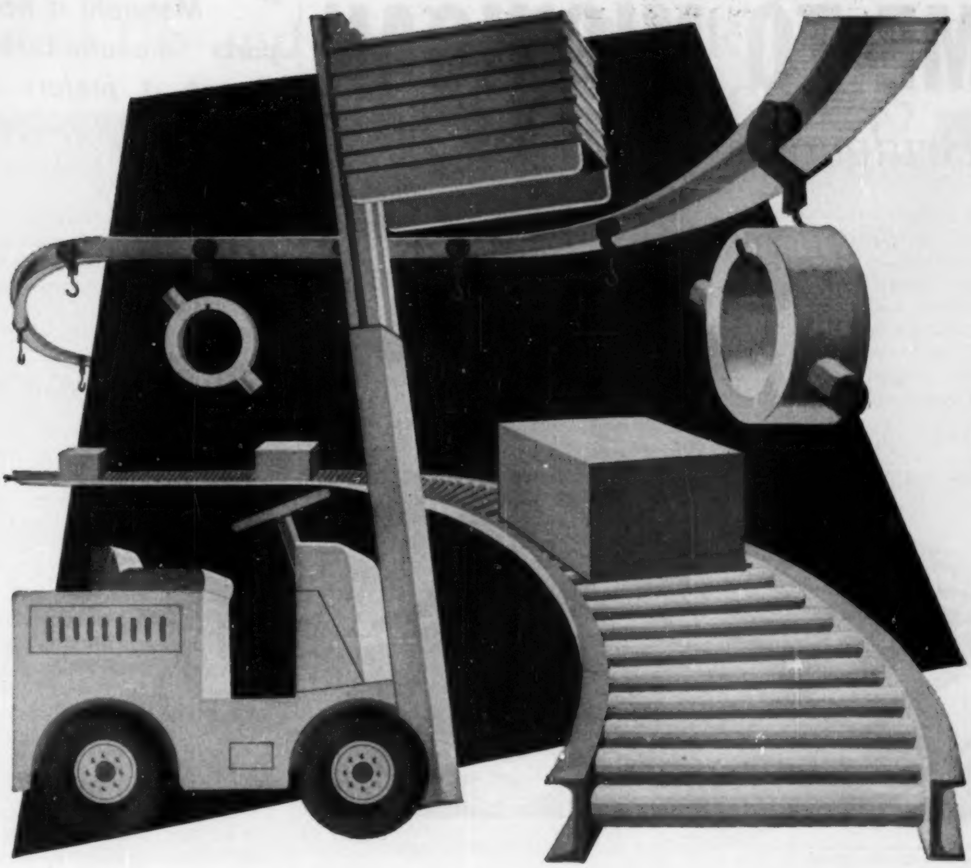
Delco is set up to run 1,200 to 1,500 car radios a day. The machines are capable of turning out 1,800 assemblies in an hour, so the factory can stockpile the assemblies for subsequent hand operations. Only 41 of 193 assembly steps on a car radio can be mechanized right now; as a result hand work sets the pace.

Motorola also turns out 1,200 to 1,500 radios a day, but its engineers see an advantage in not being bound by considerations of writing off an investment in machinery. They say they can put into production any improvements that they or their suppliers make in an electronic circuit, without breaking stride to retool any assembly machines.

• **Backing Down**—Several electronics producers who have developed automatic assembly machines have found—unlike Delco—that their volume didn't justify their investment. They have had to modify their assembly process.

One of the commonest ways out has been to use insertion heads that are operated individually. An assembler picks up the printed circuit board, places it in a jig, and steps on a treadle. Each head can install only one type of component, but it is faster than hand assembly.

United Shoe Machinery Corp. and the Mechanical Div. of General Mills, Inc., are selling a large number of such machines. General Mills, in fact, has dropped a fully automatic machine from



". . . Motorola is heavily in parts manufacturing although it prefers to buy from outside sources . . ."

STORY starts on p. 92

its Autofab line to concentrate on individual-assembly machines. A company spokesman says the big integrated machines "were two or three years ahead of their time and will have to await component standardization."

IV. How the Wind Blows

Which will eventually win out—advanced mechanization or semi-mechanization? One guess is about as good as another. However, several components suppliers seem to be backing the pre-assembly idea.

Erie Resistor Corp. of Erie, Pa., for example, is selling its PAC system, a modular package of resistors and capacitors in a hard plastic coating, to at least eight major manufacturers. PAC units are made in automatic equipment, are pretested and ready for insertion in the board. As many as 15 components can be inserted in one operation, and the area of printed board is notably reduced.

Erie says the increased cost of PAC units is usually offset by savings in cost of printed circuit board, and labor savings are additional.

• **GE Products**—At last month's meeting of the Institute of Radio Engineers, General Electric Co. also revealed that it is betting on pre-assembled components. GE introduced a new encapsulated resistor-capacitor network that it claims will sell for less than individual parts—21¢ in quantity, compared with 24¢ for individual components. "Plus," says T. J. March, manager of GE's Specialty Electronic Components Div., "an additional saving of 1½¢ in installing one component instead of nine."

But GE isn't putting everything on pre-assembled parts, as opposed to Delco's type of machine assembly. It has also brought out a capacitor, called the Wejcap, without wire leads, for insertion in a special slot in a printed circuit.

• **Vertical Integration**—The suppliers have to be ready for whatever happens, for either system makes it more attractive for the set assemblers to manufacture their own components—either because of greater control over design changes and tolerances or because of greater volume of a given part.

Motorola is already heavily in parts manufacturing, although it prefers to buy from outside sources. Delco, like other GM divisions, favors a policy of manufacturing its own parts. END

THIS IS NATIONAL STEEL

Again the earth gives—and another canning cycle begins

Through tin plate our food needs are met the year round – always at a nutritional peak

Carlos Campbell

Washington, D. C.—It's That Season again. When the good earth—seeded and tilled by man, and slow-ripened by sun and rain—once more begins to yield bountifully of its fruits and vegetables. Foods vital to our dietary needs.

And across the U.S.A. canneries are being readied—as they are every year at this time—to see to it that we *get* these foods. Get them in our homes preserved at their nutritional peak, conveniently and abundantly at hand in all seasons.

As Carlos Campbell, executive secretary of the National Canners Association, points out, canned foods are hard to match for appetite appeal, too. "Through research in which the canning industry plays a major role, crop yields have been stepped up prodigiously. And vegetable strains have been greatly refined, made more appetizing."

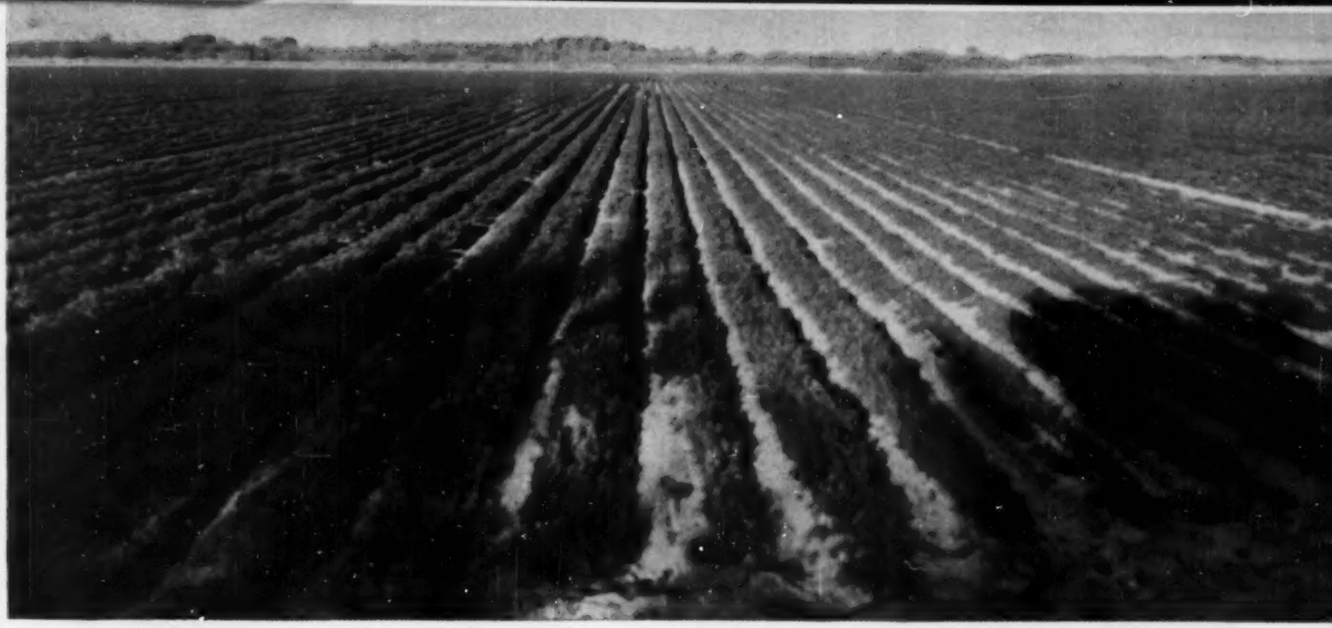
Green Bean Now "Stringless"

Examples? The green bean (sometimes known as the "snap bean" or "string bean") is today a *stringless* bean, far less fibrous than it was even a generation ago. And hybrid cross-breeding today gives us sweet corn with a smaller cob, deeper and more succulent kernels and larger ears, to make it tastier—and economically practicable to grow. And to can.

Mechanized picking, peeling and processing machinery, too—in which the canning industry has long pioneered—is bringing about the development of a uniformity of quality in various species of produce. Thus a maximum of the crop is made usable, processing is streamlined and costly waste in the field is eliminated.

Through canneries located in the heart of growing regions, crops can be picked, processed and hermetically sealed in cans swiftly and expertly before harmful exposure to air can lessen the nutritional value of the harvested produce. As a result, canned fruits and vegetables are rated high for taste and vitamin values.

By far the major portion of all crops commercially canned, says Mr. Campbell, are supplied by individual



farmers under contract at fixed prices. "Even in a vintage year when yields far exceed expectations, canners still buy up every peach, pear, cherry, pea, bean, tomato, ear of corn or whatever, as contracted for—the total output. Yes, regardless of inventory. *They* take the price risk, and the grower is assured a stable market and a dependable cash income."

Nicolas Appert, the "Father of Canning," won a prize from Napoleon back in 1809 for developing the first primitive method for preserving food in cans. The first "tin canister" of iron coated with tin was introduced by Peter Durand in England in 1810. From that humble beginning, the canning industry has developed prodigiously. Today the "tin" can provides us with food in immense variety—a balanced diet of our choice the year round.

National's Role

The "tin" can—sanitary, unbreakable, easy to store and to keep—is actually about 99% steel, tin coated for corrosion resistance.

Vast quantities of tin plate are needed to make the more than 40 *billion* cans it takes each year to bring you the myriad products packed in cans (the food industry alone uses well over half of this total). And our Weirton Steel Company is a major supplier of both electrolytic and hot-dipped tin plate for the canning industry.

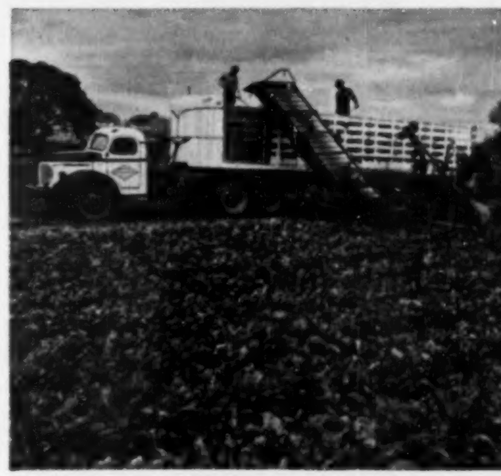
Naturally, tin plate is just one of the many steels made by National Steel. Our research and production men work closely with our customers in many fields to provide steels for the better products of American industry.

For at National Steel it is our constant goal to produce still better and better steel of the quality and in the quantity wanted, at the lowest possible cost to our customers.

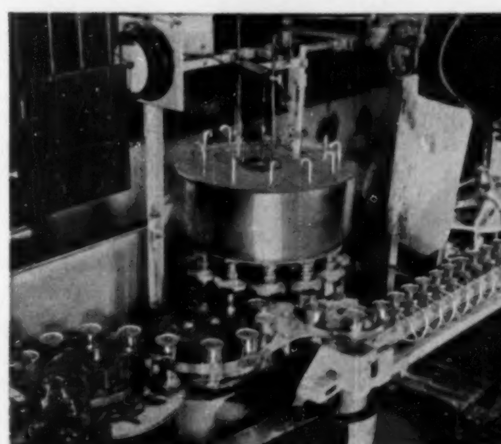
NATIONAL STEEL

THIS IS NATIONAL STEEL

GREAT LAKES STEEL CORPORATION
WEIRTON STEEL COMPANY
STRAN-STEEL CORPORATION
THE HANNA FURNACE CORPORATION
HANNA IRON ORE COMPANY
NATIONAL MINES CORPORATION
NATIONAL STEEL PRODUCTS COMPANY



Mechanized equipment and the mobility of modern transport streamline today's harvesting of fruits and vegetables, as shown here in a field of spinach soon to be cannery-bound.



Step by automatic step, in this modern cannery, cans are precisely filled with tomato juice. After contents are salted and the cans vacuum-sealed, final pasteurization takes place.

NATIONAL STEEL CORPORATION

GRANT BUILDING PITTSBURGH, PA.

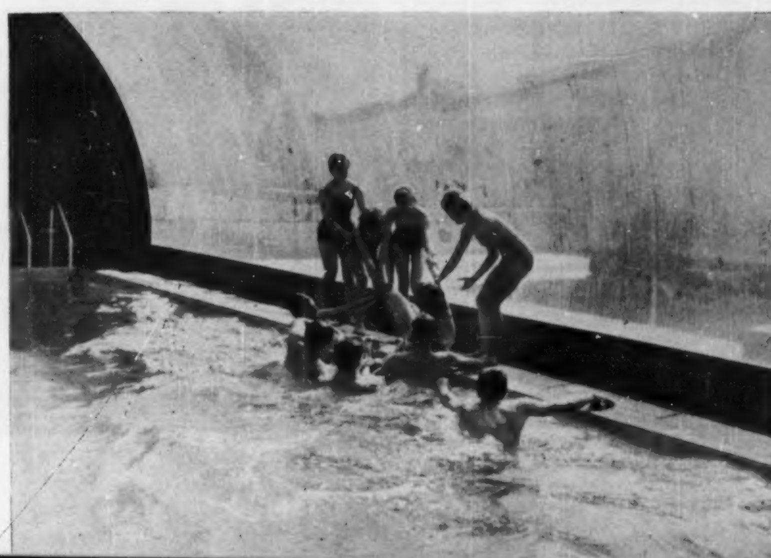
NEW PRODUCTS

A Personal Reminder to Slow Down

If you have a heavy foot on the highway, Big Brother may be watching you. And if he is, you'll know it. Big Brother is a new traffic sign (pictured at right) that can be hooked up to highway radar speed control systems. When you go over the speed limit, the sign flashes "Slow Down, You Are Speeding."

The highway safety device, patented by Motor Vehicle Research, Inc., Lee, N. H., is designed for use where there is a shortage of police or where police have large areas to cover. The theory is that the average motorist will stop speeding if he is constantly reminded by these signs. If he doesn't, a motion picture camera and counting system that can be hooked into the radar will record his violation and a ticket can be mailed to him.

Swimming Under Plastic on Chilly Days

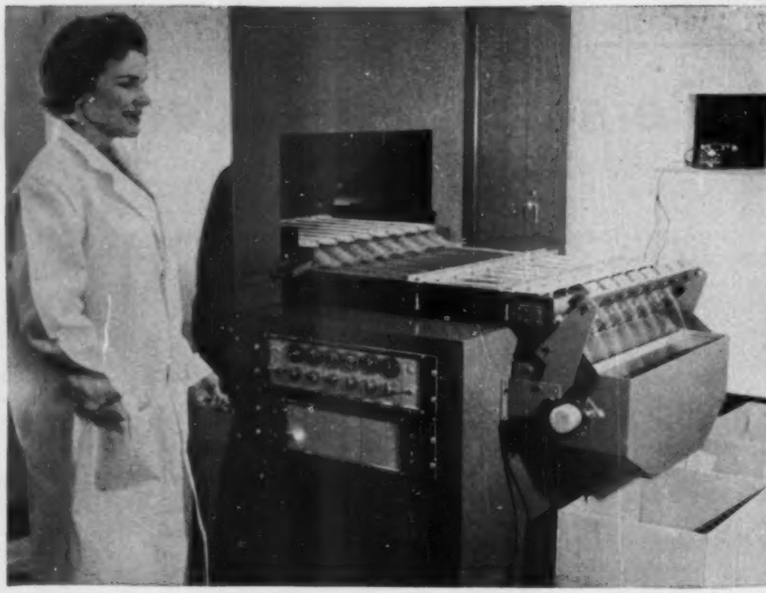


A transparent bubble turns the dream of year-round backyard swimming into a reality for swimming pool owners in cold climates. It lets in sunshine to warm the swimmers and the water. And it's sealed around the pool edge to snub the unwanted cold (pictures at right). In spring and fall, the sun provides all the heat that is needed to warm the water and air. During the winter, a water heater hooked to the filter helps the sun to keep the water at a comfortable temperature.

The structure is called Storaway. The center is made of a tough, transparent plastic and the cabana-like end sections are vinyl coated nylon that provides shade or privacy for a small bath house. In summer the covering can be folded into a small package and stored.

• **Installation**—It takes about two hours to install the beamless, trussless structure, which is supported by air pressure from a ½-hp. blower capable of keeping the building rigid and able to withstand high winds and heavy snows. The plastic cover can be made to fit almost any size pool area, leaving room for walking and sunbathing.

The manufacturer, Birdair Structures, Inc., Buffalo, N. Y., originally made similar structures for use as dome-shaped, air-supported radar protectors. The company claims it can enclose a pool area for less than $1.50 a sq. ft. And it hopes that the portable structure will find other uses as a portable greenhouse, skating rink, and tennis court cover. **END**



For Fast and Accurate Counting

This new high-speed counter can tally up to 5-million manufactured parts in one hour with an accuracy within $\frac{1}{10}$ of 1%. The machine is made by Delta Engineering Corp., Melrose, Mass.

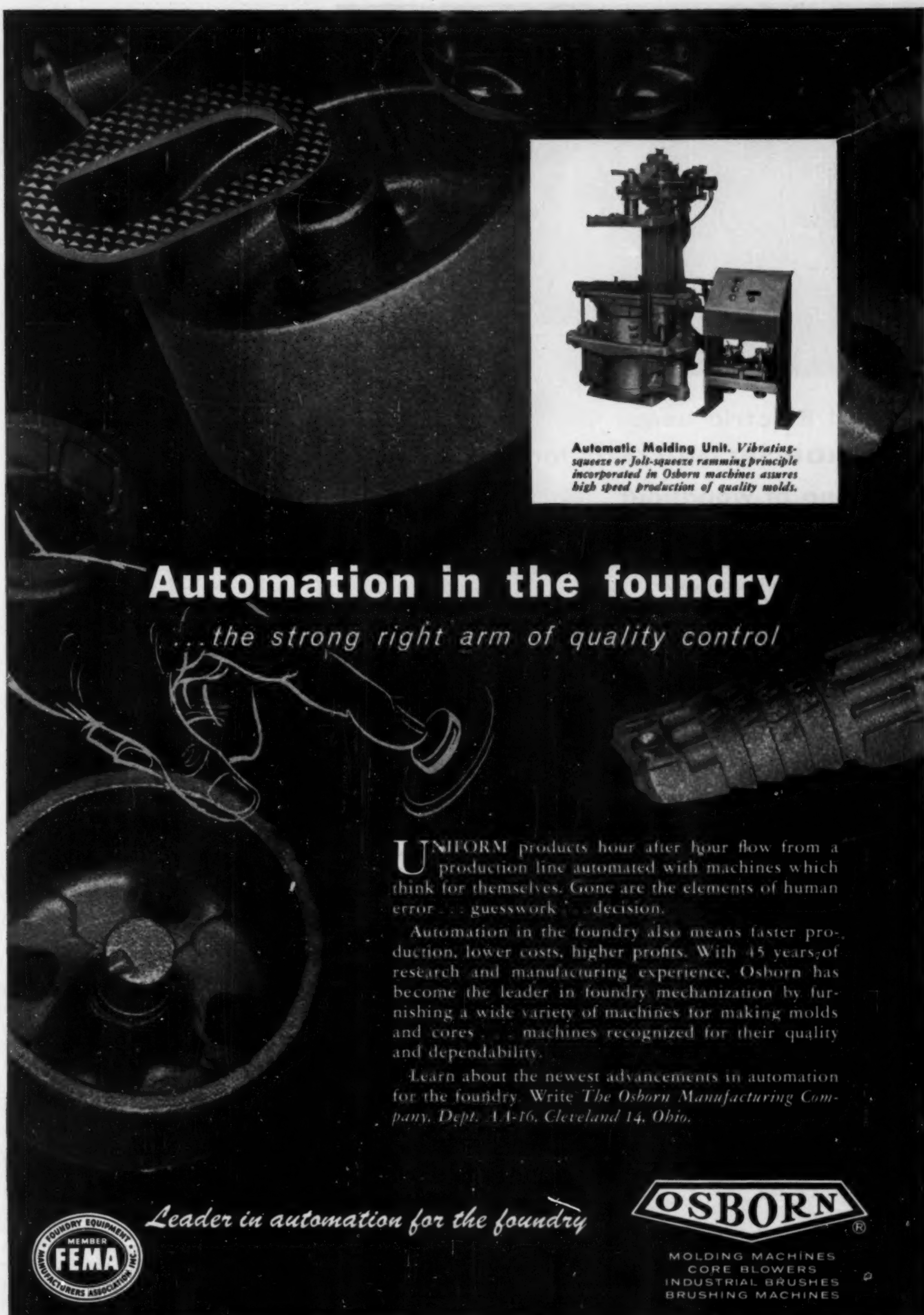
The counter makes it possible for manufacturers of small parts to get a quick accurate count before shipping bulk orders. Usually, manufacturers weigh the box of parts to estimate the quantity. But to be on the safe side they often send out more parts than were ordered.

The new machine has a hopper at the top, which holds 10 cu. ft. of parts. The parts are fed down onto a row of eight conveyors, past phototransistor electric eyes that count them. Then they go down a chute into the shipping box. The filled shipping box moves out from under the chute when it's filled and an empty box takes its place. Then the machine starts up again and repeats the process.

With eight conveyor channels, this high-speed counter costs approximately $16,000.

Now Even the Printed Page Talks

Printed pages that talk have been developed by a Japanese inventor, Prof. Yasushi Hoshino. The pages are read aloud by an instrument called the synchro-reader, shown above. The device is expected to help improve educational, filing, and mass communication methods by permitting the user


Automatic Molding Unit. Vibrating-squeeze or Jolt-squeeze ramming principle incorporated in Osborn machines assures high speed production of quality molds.
Automation in the foundry
...the strong right arm of quality control
UNIFORM products hour after hour flow from a production line automated with machines which think for themselves. Gone are the elements of human error . . . guesswork . . . decision.
Automation in the foundry also means faster production, lower costs, higher profits. With 45 years of research and manufacturing experience, Osborn has become the leader in foundry mechanization by furnishing a wide variety of machines for making molds and cores . . . machines recognized for their quality and dependability.
Learn about the newest advancements in automation for the foundry. Write The Osborn Manufacturing Company, Dept. AA-16, Cleveland 14, Ohio.
Leader in automation for the foundry
OSBORN
MOLDING MACHINES
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FOUNDRY EQUIPMENT MEMBER FEMA MANUFACTURERS ASSOCIATION INC.

to look at a picture, diagram, or text page while it talks.

• **How It Works**—The reader looks at the page fixed in the synchro-reader and at the same time the instrument plays the recorded material transcribed on the back of the page in a magnetic plastic layer. Three electromagnetic heads move over the plastic layer and pick up the recorded impulses in much the same way that tape recorder reading heads read magnetic tape. A line selector dial finds the place on the recording that the user wants to hear. Recordings can be erased or saved.

The magnetic plastic coating is inexpensive and can be applied easily to any size paper through a simple ironing process. The laminated page is only slightly heavier than paper alone.

Prof. Hoshino has developed a hand-operated synchro-printer for recording sound documents and is now working on an automatic model. Eventually, a printer is expected to be developed that is capable of reproducing in one operation both the sound and printed side of the page without using ink or chemicals.

The synchro-reader and its accessories will probably cost about $85 in Japan if it is mass produced.

• **Applications**—The instrument is expected to have special importance in a number of fields. It would be valuable, for example, for home reading of school lectures for the bed-ridden. Office documents containing both printed words and dictation could be filed easily together. And works of art could be explained while being looked at.

Liquid-Cooled Brake Developed for Autos

A liquid-cooled automobile brake has been developed by the Raybestos-Manhattan, Inc.'s Raybestos Div. at Bridgeport, Conn.

Instead of using asbestos the new brake shoe is copper lined and has a water jacket that is attached by tube to the radiator cooling system. Aim is to remove heat from the brake as fast as it is created during stopping. This prevents fading (loss of braking effect) and washout (heat expansion of the drums).

• **Tests**—The company reports tests of the Raybestos brake show that the new brake should require only 40 lb. of pedal pressure to stop a car going 80 mph. 14 times in a row at close intervals. Conventional brakes tested at the same speeds and time intervals required 60 lb. of pedal pressure initially and after seven stops required 200 lb. to bring the car to a halt. The new brake is expected to last for 100,000 miles or about three times as long as the old brakes. END

First-Quarter Earnings Are Spotty

The trend is down, though less than expected. And the slide seems to be spread pretty well across the board.

The annual early-bird rush of first-quarter earnings reports is on—and, just as most people expected, they're proving to be a rather speckled lot.

A quick check of 125 of the corporate first comers finds 20% more companies falling below their 1956 showing than were able to improve on it. Of the 68 reported declines in profits, some were strictly peanuts, but some were large enough to be disturbing (tabulation, right). By the same token, the 57 recorded gains ranged from microscopic to substantial.

The tendency toward declines spread pretty well across the board. As always, some trades did better than others—occasionally much better—but even the groups with the highest winning averages had to admit to a share of the losers.

• **Not So Bad**—However, the reports have been much less "frightening" to many investors and traders than the figures might seem to justify—for the simple reason that they had been expecting much worse tidings.

As one astute observer comments, "While the showings tend to a preponderance of declines, first-quarter earnings reports of industrial companies have found greater representation in the plus column than many observers had been led to expect." This source claims that the "encouragement derived from this fact" has helped greatly to keep alive the Big Board rally that began in mid-February (page 163).

• **Case of Steel**—This viewpoint is strongly bolstered by the steady performance of the steel shares, despite the poor to mixed profit showings that the trade has reported so far.

Of course, up to early this week U.S. Steel and Bethlehem, the two largest, have not yet reported. But of the 11 companies that had, eight were losers. The declines ranged from the moderate (Jones & Laughlin's 5%-plus) to the uncomfortably large (Pittsburgh Steel's 18.6%) to the rather startling (Armco Steel's 23%). Remember, Armco has long been rated as one of the most efficient operators in the business.

As for the steel companies reporting improved profits, all three were regional operators. Lone Star Steel's earnings were up 46.6%, Colorado Fuel & Iron's

	FIRST QUARTER SALES (Millions of Dollars)			FIRST QUARTER PROFITS (Millions of Dollars)		
	1957	1956	Change	1957	1956	Change
Allegheny Ludlum Steel	$81.3	$74.8	+ 8.7%	$4.8	$4.6	+ 4.8%
American Cyanamid	132.1	127.8	+ 3.4	13.1	12.3	+ 6.7
Aluminum Co. of America	208.6	219.3	− 5.1	18.6	24.3	−23.4
Armco Steel	E198.0	189.5	+ 4.3	E15.2	19.7	−22.7
Atlantic Refining	169.6	148.5	+14.3	14.8	12.0	+20.8
Borden Co	.....	.....	.....	.....	.....	E+ 8.0
Calumet & Hecla	15.7	18.7	−15.9	0.6	1.3	−52.3
Caterpillar Tractor	.....	.....	.....	14.6	11.6	+25.5
Cleveland-Cliffs Iron	4.3	4.8	−10.9	0.9	1.2	−24.3
Container Corp. of America	62.0	68.2	− 5.6	3.8	4.7	−17.9
Crucible Steel	.....	.....	.....	3.4	3.7	− 8.4
Diamond Alkali	30.9	30.6	+ 1.9	2.2	2.7	+17.7
Dow Chemical	154.9	137.9	+12.3	13.4	14.3	− 5.9
E. I. du Pont de Nemours	502.0	460.0	+ 9.1	*2.12	2.03	+ 4.4
Eaton Mfg	58.6	62.0	− 5.5	3.0	3.8	−18.8
Ferro Corp	.....	.....	.....	5.0	7.0	−31.5
Ford Motor	1,569.5	1,203.1	+30.5	100.5	73.7	+36.4
Gamewell Co	.....	.....	.....	0.25	0.39	−36.7
General Electric	1,048.8	946.5	+10.8	64.0	55.0	+16.5
General Tire & Rubber	95.5	83.5	+14.3	3.3	2.3	+43.0
Gillette Co	.....	.....	.....	7.0	8.3	−15.8
B. F. Goodrich Co	183.7	180.3	+ 1.9	10.2	10.1	+ 0.7
Haussmann Refrigerator	7.5	7.4	+ 1.0	0.4	0.5	−19.5
Industrial Rayon	17.5	20.0	−12.3	0.9	2.6	−64.0
Interchemical Corp	.....	.....	.....	0.8	1.1	−22.0
Jones & Laughlin Steel	204.0	195.3	+ 4.5	12.8	13.5	− 5.4
Johns-Manville Co	65.7	64.7	+ 1.5	3.0	4.1	−28.1
Kroger Co	367.6	326.5	−12.6	4.4	3.9	+12.9
Libby-Owens-Ford Glass	.....	.....	.....	8.2	8.9	− 7.5
Mead Corp	39.4	37.3	+ 5.6	2.8	2.7	+ 1.3
Monsanto Chemical	151.3	140.6	+ 7.6	11.5	11.3	+ 2.5
National Dairy	350.0	327.5	+ 6.9	7.8	9.8	−20.7
Parke, Davis & Co	37.8	32.5	+16.1	5.6	4.2	+33.4
Penn-Dixie Cement	6.7	6.9	− 2.7	0.6	0.9	−28.6
Chas. Pfizer & Co	50.7	43.9	+15.5	5.5	4.6	+19.3
Phelps Dodge Corp	.....	.....	.....	15.2	25.8	−41.1
Pittsburgh Steel	49.8	49.9	− 0.3	2.0	2.5	−18.6
H. K. Porter Co	39.1	34.2	+14.2	1.7	2.1	−19.2
Rayonier, Inc	30.0	35.5	−15.3	2.0	3.7	−46.4
Reynolds Metals	105.2	105.6	− 0.4	10.0	11.6	−13.8
Robertshaw-Fulton Controls	19.6	18.2	+ 8.1	1.4	0.9	+49.3
Rohm & Haas	43.9	40.4	− 8.6	4.1	4.2	− 2.7
St. Regis Paper	85.3	86.9	− 1.8	5.2	6.8	−23.6
Simmons Co	.....	.....	.....	.....	.....	E−25.0
Standard Products	11.9	8.5	+40.6	0.6	0.4	+41.4
Thew Shovel	12.0	11.9	+ 0.9	0.4	0.7	−40.0
Union Carbide & Carbon	351.3	320.5	+ 9.6	35.4	37.7	− 5.9
United States Gypsum	56.2	66.1	−14.9	E7.8	9.7	−20.0
United States Rubber	232.0	229.6	+ 1.0	E8.0	9.1	E−11.0
Worthington Corp	.....	.....	....	2.1	1.8	+17.3

All figures exclude nonrecurring profit items. *Estimated earnings on common stock. E Estimated.

". . . most managements blame rising costs . . ."

STORY starts on p. 111

13.3%,* and Kaiser Steel's a sensational 88.5%.

• **Discounted**—Various reasons are advanced for the recent firmness revealed by the steel stocks in the face of the generally poor showing of earnings. For one thing, the steel stocks earlier this year had started discounting some of the uncertainties in their future, notably their 1957 earnings (BW—Feb. 16'57,p127). So it seems reasonable to assume that the price drubbing the steels have already suffered has prepared investors and traders for even substantial drops in first-quarter earnings.

• **Hopeful Talk**—However, some observers doubt this explanation. They claim that the market for stocks in general has been influenced less by the earnings reports than by the optimistic statements on the year's prospects with which many corporate officials—including some losers—have been seasoning their factual reports.

The steel industry is cited as a good example of this trend. One observer remarked publicly that "When leading steel company executives outlined unexpectedly good prospects for the industry—which had been a source of misgivings—stocks responded briskly."

This marked effervescence among corporate officials may be perfectly genuine, but a lot of Wall Streeters doubt it. These cynics, talking privately, find a very hollow ring in the message of goodies in store for the rest of the year. In some cases, they find the statement a sugar-coating to help stockholders swallow sour first-quarter reports.

The spate of prophecies, apologies, and promises that has evoked this cynical reaction has attained remarkable volume. It has been a long time since stockholders have heard so often that "the rest of the year will be different." Few of the first-quarter losers neglected to dress up the news with such assurances as: "While first-quarter profits and sales were not as satisfactory as we had earlier hoped, we are confident (or 'reasonably certain') that for all 1957 our sales and earnings will prove at least slightly higher (or 'almost as good') as those reported in the year 1956."

• **Who Shot Cock Robin?**—Most managements blame rising costs for any debility in their first-quarter showings (BW—Mar.23'57,p39). The air has been ringing with complaints about the increasing squeeze on profit margins exerted by constantly rising costs of freight, labor, and raw materials.

These squawks are by no means confined to the losers. The oil business—

Viewed from 5,000 feet, this open pit copper mine at Santa Rita, New Mexico, measures roughly one square mile at its perimeter, with a pit depth of over 800 feet.

MINING IS

and patterned for more growth!

Looking for new markets? New sales goals? Mining is big and booming — all types of mining. If you need new markets that are hungry for standard products as well as new developments — look at these figures:

1. Metal and nonmetallic mining projects announced during 1956 called for expenditures of $1.9 billion (yes — *billions*).

2. Copper, for instance, will boost capacity over 40% by 1960.

3. Despite costly and complex processing, a 12-fold boost is scheduled for titanium sponge output by 1965.

4. In coal, capital expenditures will top $300 million each year until 1960.

5. Coal mining is increasing its efficiency at a rate of 10% per year (versus 3.5% all-industry average) with the growth of automation.

6. Technological growth is spurting, both from demand for rare metals and from increasing need for processing from low-grade ores.

It's a market few major companies can afford to miss — and growing companies can grow with mining. If your product does any of the following things or contributes to their ac-

along with the drug trade (BW–Mar.-30'57,p95)–has been least affected by the virus of dwindling profits. Yet one leading oil company, while reporting a 21% gain in first-quarter earnings, felt called on to warn its stockholders that "competitive price conditions and the prospect of higher operating costs will challenge management as the year progresses."

As the tabulation on page 111 shows, many–but not all–companies that scored good gains in sales had a hard time translating even a small bit of the rise into profits. Here again, operating costs were the favorite scapegoat.

• **Inventories**–Quite a few sufferers from declining earnings blamed their troubles at least in part on their customers who, as one loser put it, showed a growing tendency "not only to work off excess inventories but, as in industry generally, to pursue a policy of reducing the ratio of their inventories to the level of their sales."

In the first quarter this showed up most dramatically in the paper trade. In that group, one leading outfit reported a 24% drop in its profits–which translated into a 31% cut in per share common earnings. Another company had a sickening 46% plunge in earnings.

The reticence of customers also dealt painful blows to such other trades as building supplies, nonferrous metals, and especially the auto industry's suppliers of parts and raw materials.

Numerous other adverse factors were cited by beleagued companies in the first-quarter. Among them:

• The cost of bringing new facilities into production.

• The pre-production costs of products that are just now being introduced.

• Stepped up spending on research and development.

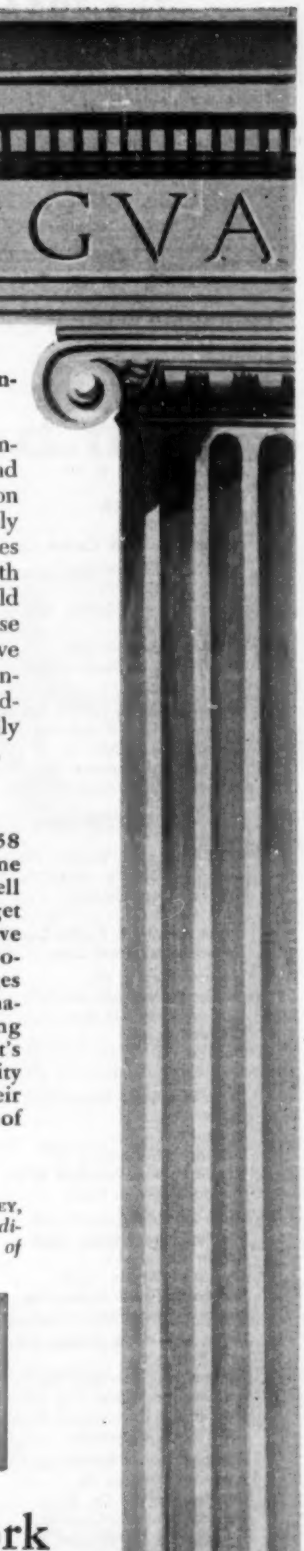
• Drops in sales to the government.

• **Dividends**–On balance, dividends don't seem to have suffered yet from the earnings trend. Last week the Commerce Dept. reported $2.8-billion in publicly-announced cash dividends in the first quarter; that's 2½% above the 1956 period.

But in plenty of individual cases the squeeze on dividends is very evident. Private surveys indicate that there have been far fewer dividend boosts in 1957 than there were a year ago, while the number of cuts and omissions has increased.

Just a week or so ago, St. Regis Paper Co. gave a good example of how swiftly dividend policy can change these days. St. Regis started with a sad first-quarter statement and followed up almost immediately with a 30% slash in its quarterly dividend rate. The news hit stockholders hard, for the price of the common quickly fell off 22%–a drop that came on top of an earlier downhill slide to 30% below the 1956 high. END

A Way to Control the Federal Budget



THE storm of protest that has arisen over the $71.8-billion Federal budget for fiscal 1958 is an encouraging sign, regardless of its immediate effects on governmental spending plans.

For many years, close observers of Federal finances have been warning the people that the loose budgeting methods which always have been and still are practiced in Washington are increasingly inadequate to cope with the multifarious, far-flung and complex operations of the Government.

The Question of Effective Control

The Executive budget is a vast aggregate of specific requests by many officials, most of whom are enthusiastic believers in the functions and programs which they respectively administer. Their natural tendency is to endeavor to expand these functions and programs and to perform them better, and this, of course, means asking for more money.

Administration witnesses appear before committees to support budget requests, but without special staffs it is impossible for legislators to examine each proposed expenditure. As a result, committee members feel, and presumably are, incompetent to criticize budget requests intelligently, and the Executive budget goes by default.

The primary considerations are (1) that an annual legislative budget be drawn up, (2) that it be drawn up with the aid of a specialized staff, (3) that it be drawn up and approved early in the session so that no appropriations will be made except in accordance with it, and (4) that appropriations be made (as recommended by the Hoover commission) for a single fiscal year only, irrespective of real or supposed commitments, so that all proposed appropriations will be subjected to critical Congressional scrutiny each year.

"Legislative budget," as the term is commonly used by members of Congress and as it is used here, does not imply abolition of the Executive budget. It means merely a listing by Congress of its own estimates of Federal receipts and expenditures, with a legislative procedure designed to hold actual appropriations in line with these estimates. In this process, the Executive budget would continue to receive due consideration but would be treated as an advisory request, rather than as a virtually unalterable standard, for appropriations.

Sound Procedure Not Enough

If the public uproar over the 1958 budget leads to effective action along some such lines as these, it will have been well worth while, whether the 1958 budget itself is deeply cut or not. But effective action implies more than changes in procedure, however essential such changes may be. It implies a continuing determination to bring and keep Federal spending under control—to make the Government's budget an instrument of economic stability subject to the will of the people and their representatives, not a runaway engine of inflation.

From the April issue of THE GUARANTY SURVEY, *monthly review of business and economic conditions published by Guaranty Trust Company of New York.*

The complete issue is available on request.

Guaranty Trust Company of New York

Capital Funds in excess of $400,000,000

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LONDON — PARIS — BRUSSELS

Member Federal Deposit Insurance Corporation

The 1956 Billion Dollar Club

IN ASSETS:

	Assets as of Dec. 31, 1956 (In Millions of Dollars)	Dec. 31, 1946	% Growth since 1946
Bell Telephone System	$16,207	$5,156	+214.3%
Standard Oil Co. (N.J.)	7,902	2,660	+197.1
General Motors Corp.	7,490	1,983	+273.2
United States Steel Corp.	4,109	2,004	+105.0
Ford Motor Co.	3,071	880	+249.0
Gulf Oil Co.	2,872	722	+297.8
Socony Mobil Oil Co.	2,820	*1,135	+148.5
E.I. du Pont de Nemours & Co.	2,615	965	+171.0
Texas Co.	2,574	936	+175.0
Pennsylvania R.R.	2,469	2,180	+ 13.3
Standard Oil Co. (Ind.)	2,437	1,066	+128.6
General Electric	2,221	857	+159.2
Southern Pacific System	2,118	1,624	+ 30.4
Bethlehem Steel Corp.	2,090	891	+134.6
Standard Oil Co. (Cal.)	2,041	785	+160.0
New York Central R.R.	2,021	1,698	+ 19.0
Pacific Gas & Electric	1,979	991	+ 99.7
Consolidated Edison (N.Y.)	1,725	1,173	+ 47.1
Atchison, Topeka & Santa Fe Ry	1,534	1,219	+ 25.8
Sears, Roebuck & Co.	1,503	460	+226.7
Sinclair Oil Co.	1,473	485	+203.7
Union Pacific R.R.	1,459	1,207	+ 20.9
Humble Oil Co.	1,433	591	+142.5
Union Carbide & Carbon Co.	1,417	439	+222.8
Phillips Petroleum Co.	1,373	332	+313.6
Shell Oil Co.	1,368	474	+188.6
Commonwealth Edison Co.	1,349	949	+ 42.1
Chrysler Corp.	1,295	390	+232.1
Baltimore & Ohio R.R.	1,284	1,156	+ 11.1
Westinghouse Electric Corp.	1,264	503	+151.3
Cities Service Co.	1,219	859	+ 41.9
American Gas & Electric System	1,159	589	+ 96.8
Aluminum Co. of America	1,158	350	+230.9
Chesapeake & Ohio Ry. #	1,040	617	+ 68.6
International Harvester Co. #	1,009	560	+ 80.2
Tennessee Gas Transmission Co. #	1,007	86	+1070.9

IN SALES:

	Sales or Revenues 1955 (In Millions of Dollars)	1946	% Growth since '946
General Motors Corp.	$10,796	$1,963	+450.0%
Standard Oil Co. (N.J.)	7,127	1,622	+339.4
Bell Telephone System	5,825	2,094	+178.2
Ford Motor Co.	4,647	895	+419.2
Great Atlantic & Pacific Tea Co.	E 4,600	1,435	+220.6
United States Steel Corp.	4,199	1,496	+180.7
General Electric Co.	4,090	912	+348.5
Sears, Roebuck & Co.	3,556	1,045	+240.3
Socony Mobil Oil Co.	2,750	* 761	*
Chrysler Corp.	2,676	870	+207.6
Swift & Co.	2,429	1,308	+ 85.7
Gulf Oil Co.	2,340	562	+316.4
Bethlehem Steel Corp.	2,327	788	+195.3
Texas Co.	2,046	587	+248.6
Armour & Co.	2,011	1,184	+ 69.8
Safeway Stores, Inc.	1,990	847	+134.9
E.I. du Pont de Nemours & Co.	1,917	662	+189.6
Standard Oil Co. (Ind.)	1,890	651	+190.3
Shell Oil Co.	1,635	443	+269.1
Westinghouse Electric Corp.	1,525	378	+303.4
Kroger Co.	1,493	574	+160.1
Standard Oil Co. (Cal.)	1,453	373	+289.5
Goodyear Tire & Rubber Co.	1,359	617	+120.3
National Dairy Products Co.	1,353	742	+ 82.3
Union Carbide & Carbon Co.	1,325	415	+219.3
J. C. Penney Co.	1,292	677	+ 90.8
International Harvester Co.	1,252	482	+159.8
Republic Steel Corp.	1,244	413	+203.1
Sinclair Oil Co.	1,180	376	+213.8
Radio Corp. of America	1,121	236	+375.0
Firestone Tire & Rubber Co.	1,115	578	+ 92.9
American Tobacco Co.	1,083	859	+ 26.1
Douglas Aircraft Co. #	1,074	*	*
General Dynamics Corp. #	1,048	*	*
Montgomery Ward & Co. #	1,046	655	+ 59.7
Phillips Petroleum Co. #	1,039	220	+372.3
Proctor & Gamble Co. #	1,038	346	+200.0
Boeing Airplane Co. #	1,005	*	*

— New member last year. * — 1946 figures not comparable or not strictly comparable.
E — Estimate.

The Total Is Up

Net working capital hit another high at the yearend. But its components show decline in corporate liquidity.

For the 15th straight year, net working capital of all U.S. corporations—excluding banks and insurance companies—set a new record last year. Corporate working capital at the yearend was $108.2-billion, the Securities & Exchange Commission reported this week. That's $1-billion more than the previous record set at the end of the third quarter, and $5.3-billion more than at the end of 1955.

But don't be too impressed. Any banker will tell you that liquidity of a business can't be judged solely by the size of its working capital, anymore than the freshness of an egg can be judged by looking at its shell. The credit man also wants to know what makes up the working capital; and when you break down the latest SEC estimates you find that liquidity has actually retrogressed despite the record growth of working capital—which, of course, is the excess of current assets over current liabilities.

• **Ratios**—Thus at the end of 1956, current assets covered current liabilities only 1.98 times, compared with a 2.05 ratio in the middle of the year, and 1.99 as 1955 ended.

Quick assets—cash, government bonds, receivables—also showed the lowest ratio to current debts (1.29) since the 1.25 of 1953. At the end of 1955, the ratio was 1.32.

There was an even steeper falling off in another very important measure of liquidity: the relationship of cash and government bond holdings to current liabilities. At the end of 1956, such holdings were only 49% of the debts, compared with 53.8% at the end of the previous year. Indeed, it was the worst showing since the mid-1940 war years, with the single exception of the 46.3% recorded last Sept. 30.

• **The Causes**—The falling off of these ratios at a time when working capital is rising is due to these factors:

• As SEC points out, the rise in working capital last year largely reflects the "substantial rise in receivables and inventories."

• At the same time, corporations liquidated their holdings of government securities in substantial quantities; through the year the drop was $4.8-billion, or 20%. And there was no corresponding increase in cash holdings, which went up only a modest $700-million. END

FINANCE BRIEFS

The bears are more active in Wall Street. On Apr. 15, the short position was 3,071,799 shares, highest since Feb. 15, 1955; in 880 of the Big Board's 1,503 issues, shares had been borrowed and sold in the hope of replacing them at a lower price. On the American Stock Exchange, the short interest reached a record 610,615, including 303 of the 863 listed issues.

•

Lower-cost vacations: Northwest Airlines, Inc., hopes by this weekend to have Civil Aeronautics Board approval of its proposed cut of interest rates from 12% to 8% on its installment plan vacations.

•

Bankers acceptances outstanding reached a 25-year high during March, rising $26.3-million to a total close to $1-billion. In the 1956 month, they shrank by $6.5-million. A big factor was the rise in bills to finance France's oil purchases arising from the Suez crisis (BW—Mar.9'57,p31).

•

A contraseasonal rise of about $115-million in business loans at leading New York banks marked the week ended Apr. 17, following a week in which there was no change. In the 1956 week corresponding to this Apr. 17 there was a $60-million decline. Sales finance companies accounted for $71-million of the latest rise.

•

Auto designers are blamed for at least part of increasing insurance bills by Kenneth B. Hatch, president of the Fire Assn. of Philadelphia. Hatch says that wrap-around windshields, fancy tail fins, and ornate trim all add to auto repair bills, and consequently insurance premiums.

•

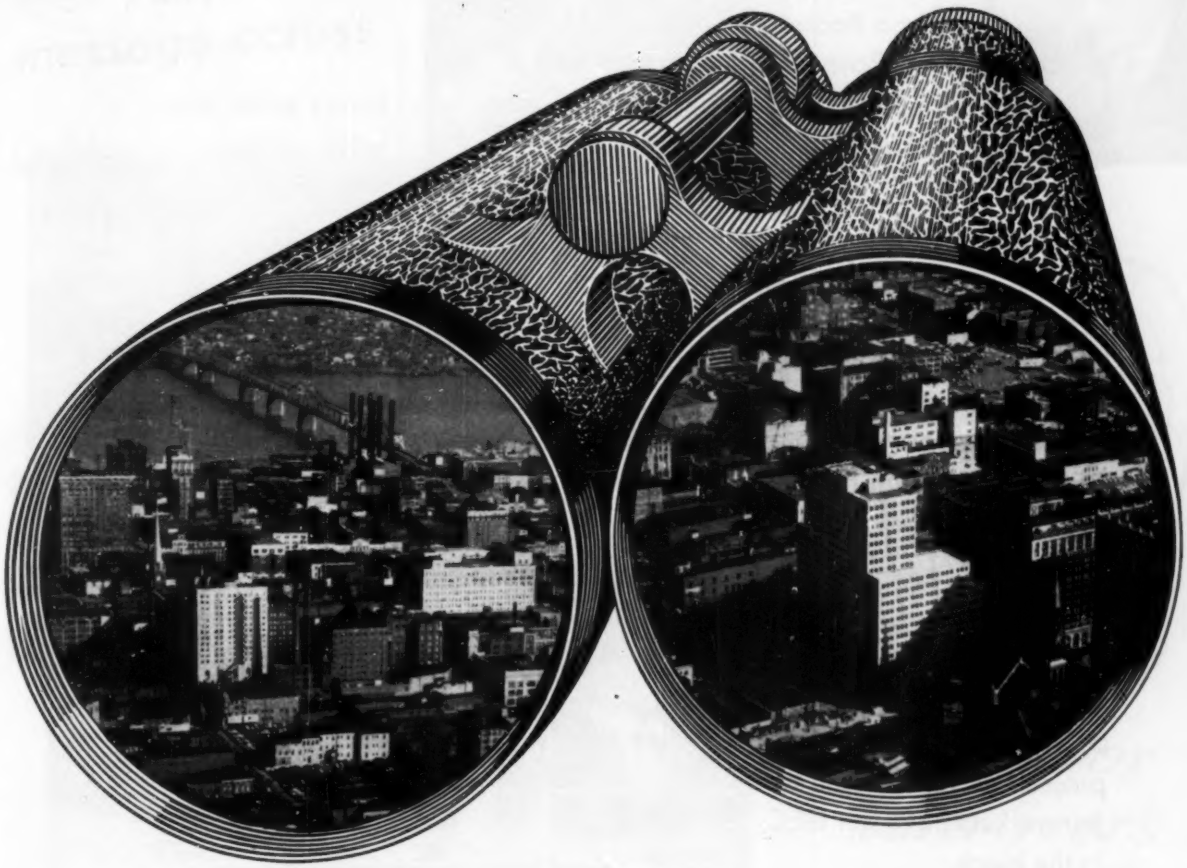
The Federal Deposit Insurance Corp. says total assets of the 13,441 banks it covers reached a record $241-billion last year. That's an increase over 1955 of about 4%, just about the same percentage rate of increase that has prevailed for 10 years.

•

National Board of Fire Underwriters reports that March fire losses hit an estimated $104.6-million, the second time total losses reached $100-million. The other time was January, with $115.3-million. Toll for the first quarter of 1957 was about $315.4-million, up 16.7% over a year ago.

•

The first "all-dog" insurance company has been chartered by New York State: Animal Insurance Co. of America, devoted solely to animal mortality insurance.



LOOK AT LOUISVILLE FOR DIVERSIFICATION

Texas Gas Transmission Corporation invites you to consider Louisville, Kentucky, and its immediate area in your plans for diversification, expansion and new plant locations. The Texas Gas pipeline system provides assurance of abundant supplies of clean and economical natural gas. In addition to this prime fuel, Louisville possesses the other prerequisites for ideal industrial operation such as land, labor, transportation, water and other utility supplies. Take a look at Louisville for a solution to your growth problems.

Louisville Gas and Electric Company, a customer of Texas Gas, provides natural gas for industrial and domestic uses in the Louisville, Kentucky, area. Indiana Gas & Water Company, another customer of Texas Gas, supplies the Indiana portion of this vital growth area.

Write or telephone Texas Gas Transmission Corporation, Owensboro, Kentucky, for detailed studies pointing out the industrial potentials of greater Louisville—in the Texas Gas service area.

TEXAS GAS TRANSMISSION CORPORATION

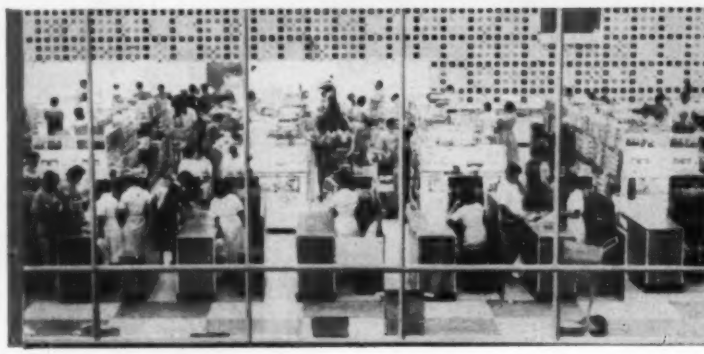
General Offices—Owensboro, Ky.

SERVING THE *Big River* REGION

BUSINESS ABROAD

A decade ago,
Nelson Rockefeller began the
first Point Four project with a
company to boost private enterprise
in Latin America.

But his
International Basic Economy Corp. soon proved
that **good will and capital resources weren't enough.** Some schemes—including
IBEC's Venezuelan fisheries—lost heavily.



Trial and error has paid off. Today such
projects as Venezuelan supermarkets have put IBEC
in the black.

NOW IBEC is looking for new worlds to conquer—

branching out into Europe, Asia, maybe Africa, and
spreading U.S. financing methods which could speed
the growth of a capital market in underdeveloped
countries.

10-Year Dream Turns a Profit

For 10 years, the International Basic Economy Corp., created by Nelson Rockefeller (picture), has been trying to combine a social-economic vision with practical business in bringing North American financial and industrial technique to South America.

It has been a trying decade. Sometimes the vision of helping Latin Americans to raise their living standards has been thwarted by age-old commercial or social ways; sometimes an investment proved basically unprofitable; sometimes management didn't measure up to the challenge.

And through all its trials, IBEC was dogged by a misunderstanding, both in the U. S. and abroad, of its long-range goal: a profit, as well as social betterment for underdeveloped countries. IBEC somehow got mixed in the public mind with Rockefeller philanthropy, blurring its identity as a serious business undertaking.

• **Signs of Vigor**—Today, however, there is evidence that IBEC is settling down to a new expansion, not only in Latin America but all over the map:

In Sao Paulo, Brazil, an IBEC subsidiary is selling shares in a new open-end mutual investment fund for the small investor. At the rate of 1-million cruzeiros' worth a week—about $54,000, and a big deal in Brazil—the sale has accounted for more than 5-million cruzeiros' worth out of 30-million cruzeiros.

In Italy, IBEC officials are wrapping up a project to launch a chain of supermarkets in partnership with local interests.

In West Germany and Canada, IBEC plans to market instant coffee.

In Iraq, IBEC is working out a plan to build housing under a government

project—further evidence that IBEC has broken out of its Latin American orbit.

And in New York, officials of the company are drawing up IBEC's first public annual report. It will show that 1956 was a good year, that IBEC is now in the black, that it has, according to its managers, recouped the losses of the past 10 years.

• **Trial and Error**—Rockefeller says these 10 years taught IBEC what it can and cannot do, built up a nucleus of the special kind of management talent the company needs, gave IBEC a platform from which to launch bigger ventures. There's a hint that IBEC's capitalization of $16.5-million may be increased to permit ambitious expansion on all fronts.

To outside observers—and there aren't many who know enough of IBEC's activity through 76 subsidiaries in 12 countries to make a judgment—the company's future seems to depend on how well it has learned from earlier mistakes—and on how much time Nelson Rockefeller (above), a busy man with wide interests, is prepared to give to it.

I. Sense of Mission

IBEC is and always has been the result of Nelson Rockefeller's imagination and energy. In 1947, Rockefeller came home with a sense of mission after five years in Washington as Franklin D. Roosevelt's trouble-shooter in Latin American affairs. He and his four brothers and a sister put $6-million of Rockefeller money into a corporation that would, "in association with others, promote the economic development of various parts of the world . . . and thus better their standards of living."

Chiefly through joint ventures, IBEC today runs supermarkets and shopping centers in Venezuela, Puerto Rico, and Peru; builds low-cost housing

in Puerto Rico; pasteurizes milk in Venezuela; grows hybrid seed corn in Brazil; acts as management consultant to U.S. and local companies in Brazil; produces instant coffee in El Salvador for marketing in Canada and West Europe; manages an investment fund in Brazil; produces equipment in Ohio for extracting vegetable oils, and operates a Midwest U.S. oil company.

• **Confused Identity**—It was, of course, inevitable that IBEC would become confused with other Rockefeller enterprises. IBEC staffers who worked with Rockefeller in his wartime tour in Washington recall that when the Office of the Coordinator of Inter-American Affairs spent $12-million of the U.S. taxpayers' money to clean up malaria on Brazil's "Hump," the Brazilian people were sure it was Rockefeller money. And a special effort by the Coordinator's office to explain the difference between Nelson Rockefeller the official and Nelson Rockefeller the philanthropist never quite got the message across.

In its early days, moreover, IBEC gave color to its reputation as at least a semi-philanthropic group, rather than a straight business enterprise. That's because IBEC saw itself—and still does—as a pacesetter in the underdeveloped countries, moving in to initiate projects that local investors regarded as too "different" from established ways of business.

IBEC still feels this sense of mission, or awareness of the social aspect, as Vice-Pres. Wallace D. Bradford calls it. But it is more conscious than ever of the profit motive—its guiding rule, as in any other company.

• **Partnership**—From the start, IBEC has felt that local participation is essential to its type of operation, and a chance of profit is the best incentive to get this participation. However, particularly in the early days, IBEC's successes were often attributed abroad to Rockefeller millions rather than to dollar-and-cents business principle, and its failures were written off as broken dreams.

That's why IBEC people are eager to confess that the early mistakes came from bad business judgment, not misguided altruism.

II. Against the Tide

IBEC's effort to put food production and distribution on a footing of efficiency in South America is a good example of what happened. Rockefeller and his associates were convinced that high food costs were one of the area's great problems, fully as urgent as the effort to industrialize.

From the New York headquarters, it looked as if the first attack should be on the production end of the food business. IBEC put a lot of money into

exporting U.S. mechanized farming methods to Venezuela, as a demonstration area. It was sound theory but in practice a fiasco, even though some of the same methods have proved successful on a smaller scale on Rockefeller's private farms in Venezuela, Brazil, and Ecuador.

Similarly, a plan to mechanize Venezuela's fish industry and to freeze fillets was unsuccessful, partly because of sales resistance—Venezuelans weren't ready to buy so much fish as it was too radical a departure from their standard diet.

• **The Selling End**—IBEC then tried to cut Venezuela's high food prices by going into food wholesaling. But it found that its reduced wholesale prices were merely inflating the profits of the middlemen instead of being reflected in retail stores. That's when IBEC shifted its whole food project into supermarketing.

Today, IBEC's supermarkets are operating profitably in Puerto Rico (BW—Sep.10'55,p94) and in Venezuela, where eight stores are open and others are under construction. Rockefeller believes these markets have lowered the retail food price indexes in the two areas by as much as 15%. The food retailing tradition has been overthrown, and local companies are now setting up supermarkets independently.

This year, IBEC is taking the supermarket to Western Europe by way of Italy. It feels that Italy's highly industrialized North is spending too much of its income on high-cost food retailing.

III. Still Doing Good

Rockefeller is a bit apologetic about the prospect that IBEC's chief international enterprise will be a supermarket chain. It seems to fall short of what the company originally set out to accomplish. But he argues that food can be a critical factor in the economy, that in this sense Italy is an underdeveloped country.

Whether or not IBEC steps in, Italy may be getting supermarkets in the next decade (BW—Jul.7'56,p86), but Rockefeller points out that speeding up this process could be a significant contribution to Italy's economy.

• **New Try in Brazil**—Rockefeller is unqualifiedly enthusiastic over the new financial undertakings in Brazil. IBEC had a bitter experience there in 1952 when it set up Interamericana, an investment underwriting house, in association with the Chase bank and 14 Brazilian banks.

In retrospect, it seems Interamericana took something of a long shot in backing two large stock issues for local subsidiaries, one for a Mannesmann seamless tube plant and the other for a

Squibb penicillin factory. Within months, Squibb was embroiled in a local price war with two other makers of penicillin. Then Brazilian Pres. Getulio Vargas committed suicide, and the bottom dropped out of the market. The two plants are still running, but Interamericana took heavy losses—and, worse yet, lost the confidence of the ultra-conservative Brazilian investor.

Last October, Interamericana was reorganized. Chase Manhattan Bank pulled out, and the Brazilian banks accepted shares in IBEC's new mutual fund, which is modeled on U.S. and Swiss investment trusts. Robert Purcell of Diversified Investors Corp. is IBEC's consultant on this fund.

Shares in the fund are being sold on almost a house-to-house basis, with initial purchases as low as the cruzeiro equivalent of $15. Rockefeller sees this as a way to reach Brazil's small savers, who have never had an opportunity to invest in corporate equities in the rather exclusive local stock market.

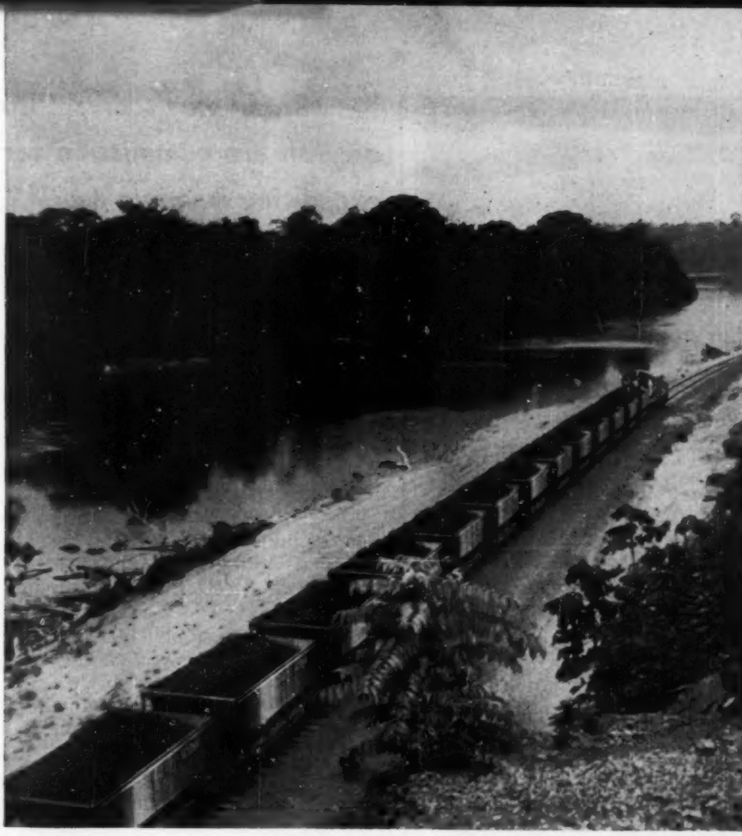
IBEC has also enriched the fund's portfolio with securities of U.S. corporations that have Brazilian subsidiaries. Richard Aldrich, local manager of the fund, hopes someday to set up a payroll deduction plan through which local employees of U.S. subsidiaries could buy shares in the fund, which in turn holds stock in the parent company.

This, Aldrich believes, would answer the Brazilian jingoists who attack U.S. companies as exploiters who don't allow Brazilians to share in their earnings. These U.S. securities might also attract investments from the wealthier Brazilians who now put their money into local real estate or into New York or Paris banks, in preference to investing in local companies.

• **More Capital**—Rockefeller views the fund as a means of raising local capital that might be used to promote new enterprises. He hopes to swing new partnership arrangements in which a U.S. company joins with IBEC and with local investors to bring modern technology to a country.

IBEC has already arranged a few such deals: between a Brazilian can manufacturer and American Can Co., a Brazilian auto parts maker and Budd Co., Rollins Burdick & Hunter and local insurance interests. It is known to be talking with Scott Paper Co. about developing timber resources in Brazil and with U.S. and Brazilian investors about iron ore (BW—Apr.21'56,p169).

Meanwhile, IBEC is building up dollar earnings at home. In December, 1955, it acquired V. D. Anderson Co. of Cleveland, maker of machinery for extraction of vegetable oil, and it also owns Pursuit Oil Co., a secondary recovery operation in Indiana, Illinois, and Kentucky. END



ORE TRAIN carries manganese from the jungles of the Amazon delta in Brazil to port of Macapa for transshipment to U. S. Bethlehem Steel is part owner of mine.

BELT LOADER at the dock site in Macapa can load the manganese ore into boats at the rate of about 2,000 tons an hour.

Manganese From Brazil's Jungles

IN THE HOT JUNGLES of the Amazon delta, Bethlehem Steel Co. is pushing production of manganese. This remote site in Brazil's Territory of Amapa promises to become the largest single source of manganese in the Western Hemisphere. Right now, the ore is riding to portside at Macapa (map and pictures) in 70-ton hopper cars and moving north by ore boat to the U.S. at an average rate of 600,000 tons a year.

Bethlehem's project is one more sign of the U.S. steel industry's continuing interest in developing new sources of steelmaking ores outside the country. Five years ago the industry was importing 2-million tons of Canadian iron ore annually. Last year the industry brought in 15.4-million tons from Canada. Similarly, U.S. Steel and Bethlehem Steel mines in Venezuela have boosted shipments of iron ore to the U.S. from 2-million tons in 1952 to 10.4-million tons last year.

• **Significance**—But for the U.S. steel industry, getting manganese outside the country is a different story from getting Venezuelan or Canadian iron ore. The industry still has a lot of iron in the Mesabi range. Development of Venezuelan and Canadian ore merely adds new sources of supply—and helps make up for the lower grade deposits in the U.S. But the industry has no large, domestic sources of manganese that it can tap. Practically all the manganese it uses comes from faraway India, Ghana, and the Union of South Africa. Now, slightly less than 10% of U.S. imports of manganese come from Brazil.

This is why Brazil is beginning to look as important to the steel industry as neighboring Venezuela. This year the biggest portion of Bethlehem's manganese output will go to the U.S. defense stockpile. Next year Bethlehem will get the largest share.

• **Other Projects**—While Bethlehem's Amapa venture is a dramatic example of Brazil's mineral wealth, it is by no means the first time U.S. companies have staked out an interest in Brazilian mining. Back in the 1920s, U.S. Steel set up a company to develop manganese properties in the state of Minas Gerais. Yearly shipments run around 20,000 tons. A few months ago, a group of U.S. investors took over the St. John

"... Brazil may soon set up an iron ore commission for expediting iron mining ..."

MANGANESE starts on p. 129

del Rey gold mine, also in Minas Gerais, from British interests that had owned it for some 125 years. The latest report is that a big U. S. mining company may soon begin developing St. John's rich iron properties.

• **New Developments**—Besides this, there are other U. S. mining projects in Brazil either under way or being studied:

• Bethlehem Steel is considering iron ore mining in Amapa and possibly in Minas Gerais.

• U. S. Steel is starting production of manganese at a site in the state of Matto Grosso. Production may run to some 100,000 tons yearly.

• Cleveland-Cliffs Iron Co.—sales agent here for Brazil's state-owned iron mining company, Vale do Rio Doce—has been the middleman in a deal involving Cyrus Eaton and the Rockefeller interests that might result in an investment of \$100-million in iron ore development. This deal is still up in the air.

The Brazilian government itself now realizes how much foreign exchange the country could earn by speeding up mineral development. The government may soon set up an iron ore commission—similar to the GEIA auto-truck commission (BW—Mar.2'57,p94)—for expediting iron mining.

During the past decades, Brazil has sat on its underground wealth and shown little interest in making it pay. There were two reasons for this. Bigger, surer profits could be made from coffee, land, and building investments. And natural obstacles, such as jungles, prevented easy surveying of mineral deposits.

On top of this, Brazil has looked on its basic resources, from oil to ores, as wealth that primarily Brazilian interests should develop. Mining companies have often restricted the amount of foreign capital they would let in. The Eaton-Rockefeller interests have run into this in trying to work out their deal. Bethlehem Steel, which operates 100%-owned subsidiaries in Chile, Venezuela, Mexico, and Cuba, has had to accept a 49% interest in the company working the Amapa deposits.

• **Manganese Discovery**—In fact, the Amapa project makes a good case study of the traditional difficulties in developing Brazilian resources. In 1941, a guide who was helping prospectors look for gold in Amapa pocketed some samples of rich-looking rock he had stumbled on. Later he handed over the samples

to the territorial governor. Finding a high manganese content in the samples, the federal government in 1946 opened up Amapa as a mining reserve.

Engineers soon recommended that the area be developed by private capital. In the bidding, Industria e Comercio de Minerios S.A. (ICOMI) won rights to explore the territory. Shortly afterwards, the company joined up with Bethlehem Steel.

• **"Political Engineering"**—Then began a three-year job of "political engineering" to quiet anti-U. S. propaganda indirectly aimed at Bethlehem. Actual work at Amapa did not get started until 1952.

Now, in the port area of Macapa, Amapa's tiny capital, ICOMI has built a huge floating dock that will ride with the 40-ft. rise and fall of the Amazon's floods. The dock can handle ore boats of up to 25,000 tons. Mechanical equipment can load 2,000 tons of ore an hour.

Using some 2,000 workers, ICOMI has spent three years laying 120-mi. of railroad track from portside through thick jungle to the mine site. Construction has included five new bridges, two underpasses, and a way station at mid-point along the route. Four years ago, it took engineers over two days to reach the mine site. Now the trip takes only four hours. The railroad has three diesel-electric engines, 80 hopper cars, around 20 service and freight cars.

At the mine site, where some 800 men are working now, you can see a mountain of ore containing at least 16-million tons of known reserves. There's another estimated 15-million tons nearby. After crushing and washing, the ore averages around 46% in manganese content.

• **Opening up Amapa**—The manganese project has opened up the whole Amapa territory. Mining engineers now use Belem, the large city on the south side of the Amazon, as headquarters for surveying the interior. In Macapa, the population has swelled almost overnight from 5,000 to 20,000. The town is moving its airport to a better site for handling more and bigger planes. The federal government is using some of the $1.7-million ICOMI pays in royalties to finance construction of a power station in Amapa that may help attract new industry. And Amapa manganese has doubled Brazil's foreign exchange earnings from mineral exports—from roughly $32-million (almost all of it iron ore exported by Vale do Rio Doce) to $65-million.

ICOMI itself has benefited from Bethlehem's technical knowhow in helping get out the manganese. More important, ICOMI got Bethlehem's help in arranging a $67-million loan from the Export-Import Bank for the port and mine development. END

Europe Gets

OEEC peers into economic future of Western Europe, sees growth continuing at healthy, if slower, rate.

Report forecasts 25% gain in industrial production by 1960, uptrend in demand for autos and other consumer durables—and looks for jump in Europe's travel earnings.

This week the countries of Western Europe got a glimpse into their economic future—one that's bound to be encouraging for European businessmen.

It is contained in Vol. II of Europe Today and in 1960, a report prepared by the secretariat and the economic committee of the Organization for European Economic Cooperation. This study of potential growth over the years 1956-60 is OEEC's most ambitious effort at economic forecasting.

• **Rapid**—According to the OEEC projections, the West European economy should continue to grow at a rapid rate. The combined gross national product should rise 17.4% by 1960, and total industrial production by 25% (charts, right). This compares with increases of 27% and 38% respectively for the years 1951-55, with the decline due largely to a slowdown in the growth of the labor force. It's still a very healthy rate of economic progress, however, involving an annual growth of productivity at a compound rate of 2.7%, or higher than that achieved in the U. S. during the last five years.

In making these projections, OEEC is not trying to lay down a program, or set a ceiling on Western Europe's economic potential. The rate of growth suggested "is simply an estimate of what is likely to happen under reasonably favorable peacetime conditions."

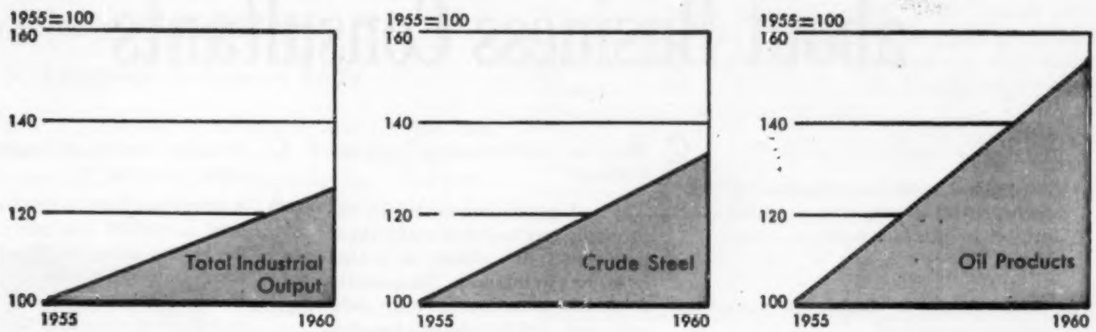
• **Gold Mine**—The sections on investment demand, private consumption, and Europe's trade with the outside world will be of particular value to European businessmen, and to U. S. exporters and investors.

The study estimates the probable level of annual investment over the next five years in the main sectors of the economy. Here are some of the figures: steel, \$1.2-billion; oil refining and distribution, \$500-million; electricity production, \$1.6-billion; coal, \$600-million; nuclear energy, \$400-million.

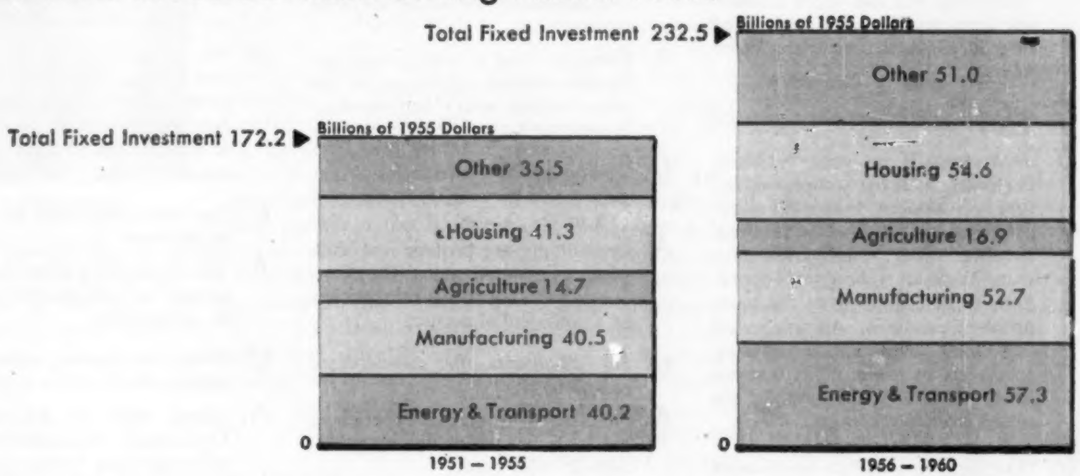
As for personal consumption, OEEC expects a continued upward trend in

Bright Glimpse Ahead to 1960

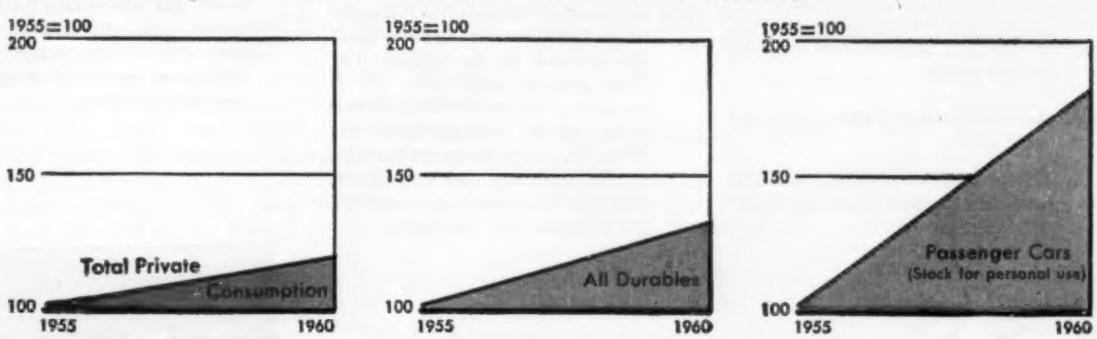
Industrial Production Will Keep Rising



More Will Be Invested Than During Past 5 Years



Private Consumption of Durables Will Rise Rapidly



Data: Organization for European Economic Co-Operation.

the demand for consumer durables.

• **Balance**—Western Europe should have no great trouble in paying for its imports, says the report, even though it will almost have to double its fuel imports. One reason is that the area should have an increasingly favorable travel balance, especially with the U.S. According to OEEC, "net earnings from travel could eventually eclipse Europe's prewar investment income" in financing its trade deficit.

If all goes well, merchandise imports from the dollar area will increase from about \$6-billion in 1955 to about \$7.2-billion in 1960. Imports of manufactured goods may rise by as much as 40%. END

In Business Abroad

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Finn to Replace Myrdal as Head Of U. N. European Economic Body

The U.N.'s Economic Commission for Europe has a new boss—46-year-old **Sakari Severi Tuomioja,** one of Finland's top economists and political figures. On Sept. 1, he will take over the post of executive secretary at ECE's headquarters in Geneva. His appointment fills the spot that **Gunnar Myrdal**—Sweden's well-known, influential economist and scholar—has held since 1947, when the U.N. set up ECE. Myrdal now plans to make a study of the southeast Asia region for the Twentieth Century Fund. He will live in New Delhi, where his wife serves as Sweden's ambassador to India. Tuomioja has been Finland's ambassador to Britain since 1955. Prior to that, he was prime minister of Finland. At one time or another, he has held such key posts in the Finnish government as governor of the Bank of Finland, finance minister, and minister of commerce and industry. He has also been a candidate for president of Finland.

S. S. TUOMIOJA

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French Railroad Invites the Tourist To Bring His Car on the Same Train

France's state-owned railroad, SNCF, is out to get the auto-minded tourist back on board.

Normally, if a tourist should want to ship his auto by train, it would go by freight and arrive at the tourist's destination a day late. Now SNCF is experimenting with "mixed trains": Auto and tourist ride the same train—and baggage in the auto gets a free ride. Two experimental trains will operate this spring from Lyon to the port of Boulogne and to the French-Belgian border.

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Ford Grant Will Bring 200 Engineers From India to Study U. S. Steelmaking

The Ford Foundation has come through with a $1.5-million grant that will give some 200 Indian engineers a close-up look at the U. S. steel industry's latest operating methods.

During the past year—as part of its steel expansion program—India has leaned heavily on Russia for training engineers in steelmaking techniques. Over 300 Indians now are touring Russian steel mills to learn how to operate India's Russian-built mill at Bhilai—one of three the Indian government has under way. A handful of engineers from India's privately owned Tata Iron & Steel Co. have come to the U. S. recently for training at Kaiser Steel's Fontana (Calif.) mill. That's in line with Kaiser Engineers' contract for helping Tata Iron & Steel expand its output and build new facilities.

Now, under the new program, Indian engineers will begin training next September at major steel companies here—from U. S. Steel to Armco Steel—as well as at leading technical schools.

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International Chamber Proposes 6-Nation Economic Pact in Western Mediterranean

The International Chamber of Commerce has proposed a joint economic development program for the six countries—Italy, France, Spain, Morocco, Tunisia, and Algeria—that ring the western part of the Mediterranean. The program would center on joint development of North Africa using both public funds and private capital.

The idea, put forward by Warren Lee Pierson, ICC's outgoing president and head of Trans World Airlines, with get a thorough airing at next week's huge biennial ICC meeting at Naples in Italy.

However, observers see little future in this "Mediterranean investment club." For one thing, the proposal overlaps the six-nation Common Market and Eurafrica scheme (BW—Apr.20'57,p112) which may soon begin operating. For another, the proposal won't get anywhere with Tunisia and Morocco—observers say—until France settles its troubles with Algeria. And, of course, private capital won't go into North Africa until the political situation cools off.

It's thought that ICC's proposal may aim indirectly at letting Spain into the Common Market through the back door. But Spain, at present, would be an economic liability to the Common Market.

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Business Abroad Briefs

Brazil's boom: France's Simca and Peugeot and Sweden's Volvo are probably the next in line to set up new **vehicle assemly plants** around Sao Paulo. . . . Japan's cabinet has O.K.'d a 40% investment in a Brazilian **steel mill** costing over $100-million that Japan and Brazil will jointly build. . . . Rio's rickety **transport system** will get 250 trolley buses from an Italian combine that includes Fiat.

In Japan: The Harima Shipbuilding Co. has orders from **Tidewater Oil Co.** for two new supertankers of 66,000 deadweight tons each. . . . **Westinghouse Electric International** has sold two huge turbine generators to Kansai Electric Power and Kyushu Electric Power for a total of $13-million.

MANAGEMENT

Katy's Doctors Hold

The new management team is now prescribing some bitter medicine for Missouri-Kansas-Texas RR but thinks it has the right remedies—if it gets some breaks.

WILLIAM DERAMUS was called in as Katy president this January because of his special talent for nursing sick railroads.

ROBERT THOMAS, chairman of executive committee, thinks Katy faces a healthy future despite its troubles.

When the Missouri-Kansas-Texas RR last month suddenly closed down its accounting office in St. Louis in a secret night move and tacked up a notice informing employees they could move to the mid-point of its line at Dennison, Tex., it kicked up a storm that echoed in the halls of Congress. It also pointed up the desperate measures that might be needed to keep a sick railroad running (BW—Mar.30'57,p.39).

Some observers even wonder whether the 90-year-old Katy can be kept alive. One important element in that riddle comes up next week when a new recapitalization plan for the road will be submitted to the Interstate Commerce Commission for approval. Three earlier plans already have been turned down. A fourth turndown could be the last.

• **New Team**—The two men pictured, William N. Deramus III, the road's new president, and Robert E. Thomas, chairman of the executive committee, are gambling that the road can be saved. Both know railroading. Deramus, now 41, became president of another sick railroad at 33, nursed it back to robust health. Thomas, now 42, has been a specialist in rail investments for a decade.

I. Katy's Troubles

Katy is a comparatively small road. It operates 3,240 mi. of track from St. Louis and Kansas City to Houston and Galveston; its annual volume averages $75-million. All along its main routes it has tough competition, including the Santa Fe, and the Missouri Pacific.

• **Shrinking Income**—Katy runs through rich oil territory, but the growth of pipe lines over the past decade has drained off much of this lucrative business. The seven-year drought has clobbered its agricultural business. Katy has more of its line within the Southwestern drought area—and less of it outside—than any of its competitors. More business was lost when munitions plants along its lines closed.

Today Katy needs cash, desperately. Its trackage is only fair at best. Its yards are outmoded, and a sizable portion of its locomotives are in bad shape. It could use well over $20-million right now for rehabilitation alone. Its common stock hasn't paid a dividend since 1930, its preferred dividends are in arrears some $107-million, still piling up at a $5-million annual rate. And the Katy has one of the highest expense ratios of all U. S. railroads.

• **Unpopular Moves**—To raise some of the cash, the new team has been chopping costs—in payrolls, accounting, telephones, public relations, and everywhere else possible. Exactly how much has been saved no one knows yet. The abrupt closedown of accounting offices in Parsons, Kan., and St. Louis was part of the cost-cutting—which reaped an unexpected harvest of public and labor resentment. Today the furor has died down—but the ax is still swinging.

The current story of the Katy goes back to mid-1955, when Edward N. Claughton, a Florida millionaire, died, and it was discovered that his estate held over 500,000 Katy shares, more than 60% of the outstanding common.

• **Enter Thomas**—Thomas, a vice-president of Pennroad Corp., an investment company with substantial holdings in several roads, had been interested in Katy for some time. When the big bloc of stock became available, he persuaded Pennroad, State Street Investment Corp. of Boston, and Bear, Stearns & Co., New York, to buy it as a "special situation." Pennroad and State Street each took 200,000 shares, Bear, Stearns 50,000, in a private sale, at a price "somewhere below" the market. Outsiders estimate the price was probably in the $12-$13 range. (Market price has since dipped to $10.) Thomas became chairman of Katy's executive committee, as the representative of the three-company consortium.

Though Katy was in bad shape, Thomas figured it still had a good future—if its problems could be solved.

Katy is a Southwest road, with the shortest haul between St. Louis-Kansas City and the Dallas-Ft. Worth area. Some 40% of its trackage is in Texas. The Southwest as a whole, and Texas particularly, is still growing, and presumably Katy could grow with it.

Thomas was also gambling on weather. Once the weather broke, went back into a wet cycle, the area—and Katy—had to improve.

But for a while, nothing developed—except more problems. The drought continued for another year and a half—only in recent months have the rains come, which might signal an end to

Out Hope for a Richer Life

the cycle. And the new owners ran into a thoroughly unexpected problem in cross ties, lumber the rails ride on.

• **Unexpected Problem**—Normal tie replacement for the Katy is 300,000 to 400,000 annually. During the war years, to avoid excess profits tax rates, the road put in 3-million in three years, at a time when quality and treating of ties was far from adequate. Normally a tie has a life of at least 25 years. But seven years of drought had dried them out. When the rains came this winter, the ties soaked up water so thirstily they literally started to burst. So now Katy has to pony up $15-million for accelerated replacement.

The new bosses also found that rail replacement had been too low for several years, some 40 of its diesels needed major repair, and its bad car rate (cars laid up awaiting repair) was running as high as 12%.

Over the last decade, Katy management had been hung between the horns of a dilemma. Preferred dividends were falling behind. Pressure from investors rose steadily. So for several years, the old management was spending most of its time wrestling with the preferred stock problem, tended to postpone vital operating problems.

II. Financial Prescription

Now the new owners are ready to make a new agreement with preferred holders. Three previous attempts have failed—but there are indications that some of the large blocs of preferred holders are willing to go along with the latest recapitalization plan.

• **New Plan**—For each share of $100 preferred, together with the $159 dividend arrearages, Katy proposes to exchange one $100 5½% income debenture maturing in 75 years, plus a $100 charge-to-income certificate—to be retired by 10% of earnings after sinking funds—and one share of common stock.

The additional common stock will be issued against the 1.5-million shares authorized—currently there are approximately 809,000 outstanding. The additional 667,000 shares of common stock will reduce the consortium's share of the total from 55% to 30%. That's still enough for control.

• **The Aims**—The new plan will be filed with the ICC next week. If it goes through, it will do these things:

• Reduce the running charges against the road. The debenture interest costs will be lower than the preferred dividend—and can, unlike the preferred dividend, be charged as an expense against taxes.

• Let the team concentrate on running the road at a profit.

"If the ICC doesn't approve," Thomas adds, "God alone knows when another agreement could be negotiated." Outsiders suggest that if it does not go through, the recapitalization problem could push the road over the line to the bankruptcy and reorganization it has staved off for two decades.

III. Operational Changes

Meanwhile, things have been moving on the operating side.

Starting in mid-1955, rail laying was speeded up, the bad car rate cut from 12% to 5%, and some reductions made in payroll. But few drastic actions were taken. In March, 1956, Donald V. Fraser, then president, had a heart attack, was out for almost six months. Thomas shuttled back and forth between New York and St. Louis, where the road is headquartered, for the balance of the year. Thomas and Fraser agreed a new president was needed. In January this year, Deramus came in.

• **Calling "Dr." Deramus**—Deramus was a natural from the point of view of the group. In 1949, he had walked into a similar situation with the Chicago Great Western RR. Advertised schedules meant little. The roadbed, rails

EMPTY OFFICE is what St. Louis workers found after records were removed.

and ties were bad, and derailments were frequent. Carloadings were dropping, preferred stock was in arrears. Deramus had to rebuild the road almost from scratch—and find the money to do it.

So he slashed expenses. Pullmans and diners were cut off, leased passenger stations dropped. Operations were concentrated in the center of the line. Instead of running lots of little trains, Deramus ran fewer, heavy ones. As cash began to develop, yards were rebuilt, trackage improved. And trains ran on time. Deramus set up an industrial department, began acquiring industrial sites, peddling them for new plants, providing more traffic.

Today, the road is on its feet, dividend arrearages are paid off, and the company has started paying dividends on its common.

• **Morale Restored**—In the process, especially in the early days, a certain amount of employee resentment was aroused as workers were lopped off. But beginning with engineers, who no longer faced danger from derailments, morale has steadily picked up. Today job security on the Great Western is considered better than it ever was.

Katy today needs the same kind of surgery. A general consensus among other railroaders, investment men—and surprisingly considering the recent unpleasantness, many Katy employees—is that if anyone can save the road, Deramus can. What's in it for him is less clear. Deramus took the job, he says, "because I'd done everything I could for the Great Western, and I'm still too young to just sit on my tail and rest on past achievements. This looked like a challenge—even if I did underestimate just how great."

His tactics to date have somewhat paralleled those he used in the earlier job—"only I picked up some notoriety this time," he notes somewhat bitterly.

• **Office Consolidation**—In the past, Katy's office facilities have been spread all over the line. The legal staff operated in four different places, the engineering and passenger traffic departments in two. Accounting was scattered over four towns—Parsons, Kan.; Dallas and Dennison, Tex.; and St. Louis, Mo. As one of his moves, Deramus wanted to concentrate each activity in a single place. With the accounting department, he ran into trouble.

It started in Parsons, when he attempted to move the accounting operations out. Parsons, which was known as The Katy Town, had almost 25% of its working population employed by the Katy. Employment cutbacks there had been going on for a year—but when the move was announced, local people got an injunction to keep the Katy records from being moved out—based on a 40-year-old agreement between the road and the state to keep the office there.

• **Hullabaloo in St. Louis**—The St. Louis accounting operation included the general books—vital to continued operation. Officials were warned via the grapevine that a similar injunction was being sought in St. Louis, which could tie their records up for months. So the records were secretly moved out at night, employees told through notices on the door to report to Dennison.

The resultant uproar—which included expulsion from the St. Louis Chamber of Commerce, and violent attacks upon Deramus from the local newspapers—is still having repercussions. Some shippers—not many, and not large ones—have withdrawn business from the road. And at least two government investigations have been started.

Deramus and Thomas argue that both moves, and the way they were carried out, were necessary. Deramus did, however, in a recent letter to employees, concede that "perhaps some of the methods could have been much better handled." "But Katy dying a slow death, would be of no benefit to anyone," he added.

• **Capital Drain**—Certainly the problems he faces could bring no joy to the most ardent trouble-shooter. Net income has been shrinking steadily, from \$7.5-million in 1952 to \$3.1-million in 1955, to \$1.9-million last year. But of that last total, some \$500,000 was paper profit, resulting from an accounting change, put no cash in the till. And the last six months have been a constant drain. Actual operating losses from November through February have run close to \$1-million. Carloadings have been dropping in the past few months—down 9% in March from a year ago.

But the picture seems to be improving somewhat. The rate of loss has declined for each of the last three months. Deramus hopes that the April figures will show in the black.

Nobody knows how much effect the economy moves have had to date—because of the shifting of records and of personnel, reports are delayed, and even operating figures are weeks late.

Deramus has said that all major relocations are finished "for the present" but the economy ax must keep swinging. Katy must generate its own cash for its rehabilitation.

Says Thomas: "You don't borrow for such things—you make your repairs and charge 'em as you go." Others suggest Katy might have some trouble borrowing now if it wanted to. The road cannot look for some time to greatly increased business to up its revenues. In fact, some Katy men suggest that right now, in its current physical shape, the road couldn't haul very much more business, if it got it. And even if all the money were available immediately, it would be physically impossible to get everything done quickly enough.

• **Needed Improvements**—Here are some of the things Deramus has to do:

• Replace about 1-million ties a year for the next three or four years. Annual cost: about \$5-million.

• Relay at least 250 miles of track, at approximately \$22,000 a mile.

• Completely overhaul about 40 diesels. Probable total cost is about \$2.5-million.

• Completely rebuild the road's major yards. Probable cost of just one—the Dennison complex—between \$8-million and \$10-million.

Right now the road's cash is dangerously low. It was down to about \$6-million at the end of 1956—and the losses since then have drained off more. "But with money or not," says Deramus grimly, "we're going to take care of the ties and the diesels."

With weather improving, and economy moves taking hold, there's an even chance the road can keep its head above water. Much of indignation from the poor public relations has been dissipated. Several shippers who yanked their business have since come back—and in spite of dire hints, labor sources in St. Louis indicate there's no real danger of a major strike.

IV. Basic Ills

But the places where the biggest economies could be made are out of Deramus' reach for now.

Katy's main line traffic is usually profitable. But 60% of its total trackage is in branch lines, and most of that runs at a dead loss. Deramus indicates that, if he could, he'd like to scrap most of the branches. The road already has applications in to drop two of them—46 mi. between Altus, Okla., westward to a few miles past the Texas border, and 112 mi. between Piqua and Junction City in Kansas. Both applications have been on file for months, will not see action for more months. But

abandonments are not readily granted.

• **Passenger Operations**—Similarly, passenger operations have been a continuing drain. "Nobody uses a train in the Southwest," notes Thomas. "They use cars or planes." But a recent application to drop some passenger operations in Oklahoma was turned down. Deramus indicates, however, that passenger operations will be cut as close to the bone as the law will allow. His actions on the Great Western offer a clue there. What passenger cars there are now are really just a daycoach at the end of express, milk, and post-office trains.

• **Correcting an Imbalance**—To help get away from its heavy reliance on agriculture—and its vulnerability to weather as a result—Katy is hunting industrial sites to draw factories (money for these, Thomas indicates, is available outside the Katy debt framework). It has already turned one over—for a good-sized Sherwin-Williams Co. plant—and was instrumental in getting Johns-Manville Corp. to locate a plant in Dennison.

V. The Outlook

With all the bleak outlook, Deramus still insists that "Katy can be as fine a railroad property as there is in the country." He grants tough competition, "but with the way this territory is growing, there's lots of room for all."

For the immediate future, Deramus is less positive. It'll be well into the fall before anyone knows the ICC decisions on recapitalization, or branch abandonments—or before there's any indication of whether the new operating economies can generate cash fast enough to catch up with rehabilitation. Deramus' own contract runs for a year, with renewal options cancellable by either side upon notice, includes a stock option provision for 30,000 shares, to be allocated in 10,000-share blocks at the end of successive years. In the meantime, he's still reserving his right to walk out at the end of his first year, "if I don't like the way things look then."

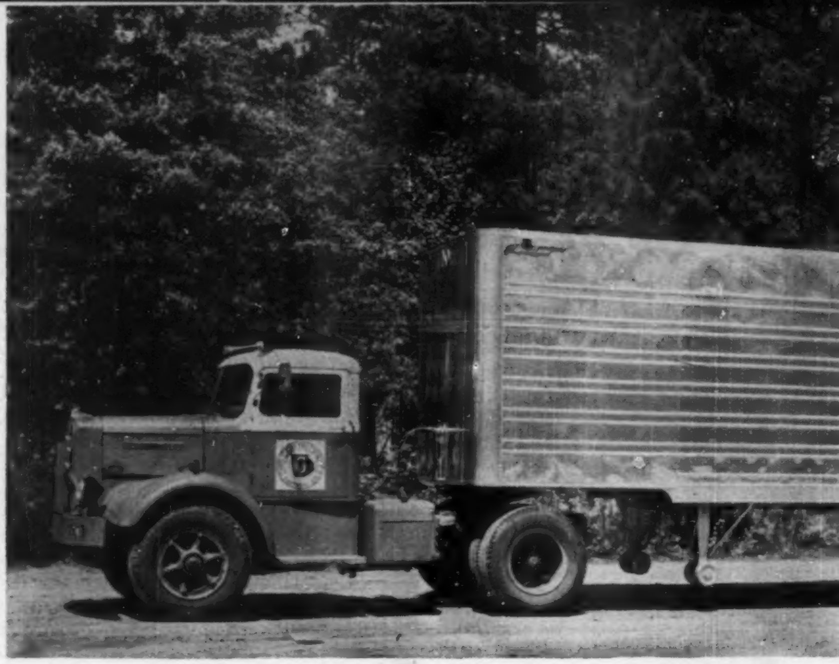
• **Sitting Tight**—The Eastern investing groups are sitting tight. Reports have been published that the consortium has given options to other roads to buy very sizable blocks of their holdings. Thomas denies that absolutely. "We have no intention of selling, and have granted no options. We knew when we went into this that it was a long term deal. When you're in a special situation, you don't worry about short-term fluctuation on the market." Thomas has sold some of his personal holdings, "for tax reasons. . . ."

Certainly, the Eastern investors can afford to sit tight for awhile. Even a very sharp decline in the stock price for Katy couldn't cost them too much, allowing for tax offsets. But they're pretty sure Katy's going to pay off. END

NATIONWIDE servicing by regional companies was born in office of American Body & Trailer's R. R. King.

ALLIANCE to push the 48er trailer has West Coast covered by Utility Products, headed by John C. Bennett.

IN SOUTH, Steel Products' Christopher Hammond, Jr., rounds out group to fight industry giants.



"Merger" for Just One

48er trailer is designed, made, and sold collectively by three companies that otherwise remain wholly competitive.

SMALL, REGIONAL manufacturers have a tough time if their regional customers grow up into national operations, demanding nationwide servicing. Generally, they fall easy prey to widerspread competitors, are hard put to find a way out. And none is hit harder than the makers of truck trailers.

The smaller trailer people, and others caught in the same wringer, have two ways of resisting—neither of them wholly satisfactory. Some yield up their individuality, merge with other companies in the same jam, and so become giants themselves. Others scramble all the harder for the shrinking regional market, hoping for meager survival.

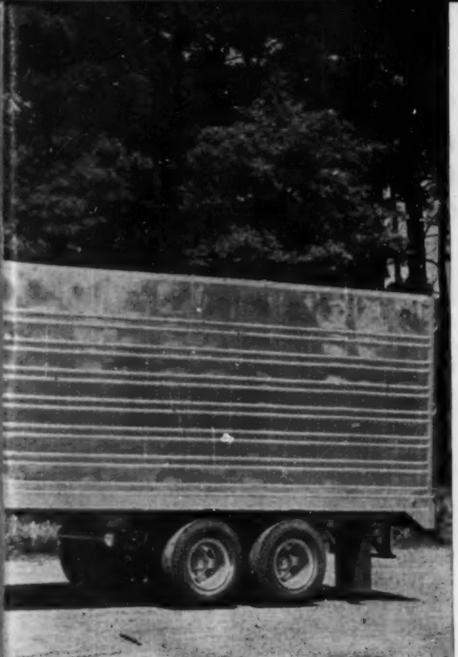
• **Third Approach**—Now three moderate-sized makers of truck trailers are trying a third solution, a sort of semimerger aimed at giving them collective corporate muscle without loss of separate identity. The three are Steel Products Co., of Savannah, maker of Great Dane truck trailers, the Utility Trailer Mfg. Co., of Puente, Calif., and American Body & Trailer, Inc., of Oklahoma City.

This month their collective bid to compete with the industry's Big Leaguers became a reality, when the 48er—a new trailer to be sold under all three brand names—began to come off the production lines. Into the making of the 48er had gone the production facilities of all three companies, their knowhow, their patents.

• **The Giants**—The aim of this composite product was to stem the flooding sales of the truck trailer industry's two giants—Fruehauf Trailer Co., and Pullman, Inc.'s Trailmobile, Inc. Last year, Fruehauf snared about half of the industry's $328-million total sales; Trailmobile accounted for another 20%. The other 150-odd companies in the field were way behind. Steel Product's Great Dane claimed a distant third place with its $9-million sales. Yet Steel Products plus its two allies figure that they can claim only about 10% of industry sales between them.

Most of the numerous small companies had been doing fine till a few years ago, with deep regional roots. Then the freight trucking companies began merging, to gain cross-country rights, in some cases including all 48 states. It became commonplace for a single trailer to carry one load clear across the continent, where in the old days a Los Angeles-New York shipment would be likely to ride in four different trailers, transshipping at Salt Lake City, Denver, and Chicago.

As a result, trailers are now away from home base for much longer periods, sometimes for six months. They have to have servicing, and parts, available all over the country. Since only Fruehauf and Trailmobile were in a position to provide this sort of service, the formerly regional buyers began to shift their orders to them. The smaller manufacturers have "had to run like the devil just to stay where we are," as Steel Products' top man,



Product

Christopher Hammond, Jr., put it.

• **Old Friends**—Early last year, the presidents of Steel Products, Utility Trailer, and American Body & Trailer began to cast about for means to fight back. Getting together was not entirely a novelty; Hammond, Utility's John C. Bennett, and American's R. R. King were old friends, had been exchanging ideas for 10 years. The companies had long had similar design and operation policies; their chief engineers met every six months for discussions.

They had cooperated before in times of trouble. Thus last year, when a strike halted Great Dane production near delivery time on a big Florida order, Utility built and delivered the trailers, charging Great Dane only the manufacturing costs.

The first meetings on the big, new problem, at King's office in Oklahoma City, bore no positive fruit. Growth was the obvious answer to the challenge of the giants. But growth capital was hard to come by. And all three family-owned companies shied away from the idea of absolute merger.

• **Another Try**—Time passed; reports from the salesmen kept getting glummer. Finally, about eight months ago, Hammond, Bennett, and King tried again. This time they came up with a plan aimed at the benefits of merger without its discomforts.

They put their corporate heads together to design a new trailer, to be sold under all three labels, with territorial sales rights dividing the whole U.S. into three chunks. Utility gets Denver and everything west of the Rockies; American gets the mid-continent area; Great Dane gets the Great

". . . each figures it's a better job than any one of them could have made alone . . ."

STORY starts on p. 140

Lakes and the Atlantic Seaboard. Costs of tooling are split equally, all others on a basis of 45% for Great Dane, 35% for Utility, 25% for American. Meanwhile, each company's other products, mostly smaller trailers, will continue to compete briskly with all comers, including the other partners.

As the end product of this arrangement, the 48er is just emerging. It's a truly collective effort. Utility made the original designs, Great Dane did the engineering drawings, Utility built the pilot model, American placed the orders for tooling. Utility buys the flooring, American the rails, Great Dane oversees the advertising. The three chief engineers hold their regular meetings twice as often now.

• **The Product**—The 48er is a dual-axle semitrailer featuring a stressed aluminum skin over formed steel structural members and offering a variety of options. Each of the companies figures it's a better job than any one of them could have produced alone. Mass purchasing has brought down the cost of parts, and made available some features—such as parts roll-formed to specifications—that formerly were out of price reach. Pooling of patents has helped, too. A single trailer now offers Utility's 10-in. brakes, Great Dane's refrigerator floor, and American's escape latch for refrigerator doors.

Distributors for all three companies will stock 48er parts; a credit arrangement is being worked out for servicing. Big orders can be shared, or farmed out if it means a savings in freight. The trio figure that no order will be too big for it: "If we got an order for 1,000 trailers to be ready in six months, we could handle it," says Bennett. The combine may even get a bit bigger; a fourth manufacturer has inquired about getting in, and there's talk of a fifth.

• **Withdrawal**—All three company presidents admit that differences and unforeseen problems will arise. But they think that as old friends they will be able to settle amicably. King says, "We know each other well enough to take care of each situation as it comes up. At least, we hope so."

Their agreement is a contract, with no set termination date. Each can withdraw whenever he likes, by forfeiting the development money already spent. They're not thinking of that now; they're too busy rushing through the first order of 48ers—30 of them for the Interstate Motor Lines, Inc., of St. Louis. END

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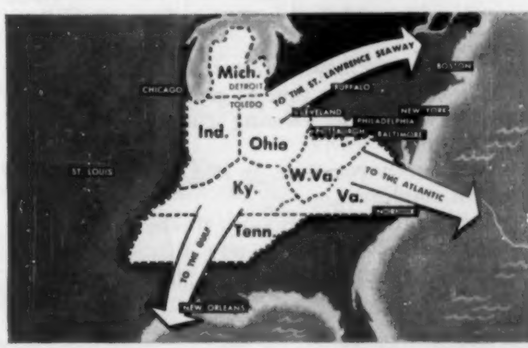

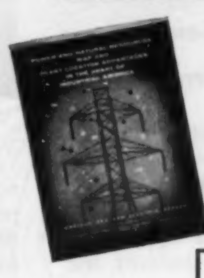

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Supreme Court Says Young's Alleghany Is Under ICC, Rather Than SEC

Robert R. Young's Alleghany Corp. is under the regulation of the Interstate Commerce Commission instead of the Securities & Exchange Commission, the U.S. Supreme Court said this week, because it does in fact control the New York Central RR. But it's still up to a lower court to decide if the plan to exchange a new 6% convertible for Alleghany's outstanding 5½% preferred (BW–Dec.8'56,p126) is legal.

The exchange was more than two-thirds completed when a stockholders group got an injunction to halt the trade. The district court ruled that the SEC had jurisdiction over Alleghany; the SEC held the exchange to be illegal. The present decision is on an appeal by Young from that ruling.

• • •

Housewives Flock to Clerical Jobs That Leave Them Time for Chores

A Minneapolis insurance company, hard put to fill clerical jobs, has come up with a program especially designed to get housewives back into the work force. American Hardware Mutual Insurance Co.'s plan allows them:

- Shorter hours–so they can leave home after children go off to school, return in time to greet them.
- Time off (without pay) during school Christmas and summer vacations.
- A higher hourly pay scale, in lieu of fringe benefits given regular employees.

Hardware Mutual says response to the progress has been so enthusiastic that there's now a backlog of applicants–and they no longer have to hire "marginal people."

• • •

Do's and Don't's of Recruiting Seniors Laid Down in Code for All Concerned

A new "code of ethics" for college recruiting has been drawn up by the American Society for Engineering Education and the Midwest Placement Assn. Necessitated, the proponents say, by "the stress of competition" for today's graduates, the code discusses appropriate conduct not only for industry, but for students and colleges as well.

For the company, the don't's have to do mainly with "elaborate entertaining" and "special payments"–to the students or to a third party influencing his final decision.

For the students, the code admonishes against "hoarding" job offers or leading a company to think they're interested in a job when they're not. A special slap on the wrists went to padding expense accounts for company visits; "only expenses directly incurred" should be included, the code reminds.

For the colleges, the code prescribes a role as impartial intermediary, providing the employer with pertinent data about the student and, in turn, advising (but not "unduly influencing") the student on what to look for in a job offer.

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Now That It Has Diversified Into Defense, Gruen Wants Out

Gruen Industries, Inc., now wants to get out of the defense business it diversified into just two years ago. The company says negotiations are under way with prospective purchasers to dispose of all or part of its electronics, precision products, and research and development divisions. It all hinges, of course, on a good offer.

Gruen attributes the move to "unprecedented growth" in its watch business. Sales in 1955 and 1956 were ahead of predictions, and in the first quarter of 1957, Gruen says, they were again "exceeding all expectations." This induced management to think about rejiggering capital use–and trying to sell the Cincinnati defense works.

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Humble Oil Picks Geologist As President for First Time

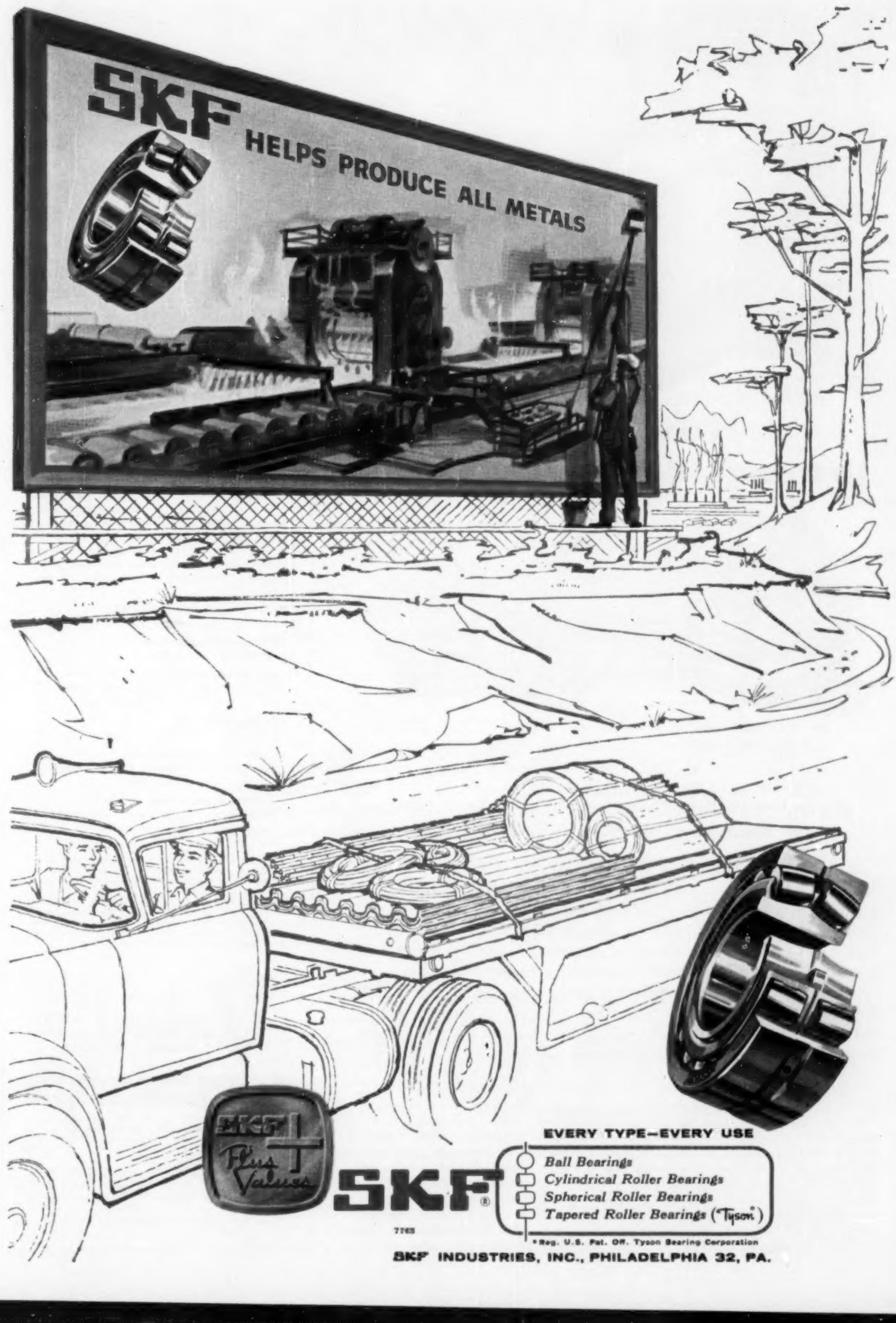
Humble Oil & Refining Co., the nation's largest domestic producer of crude oil, will have a geologist for president for the first time when Morgan Davis is named to the post, probably early next week. Davis succeeds Hines Baker, who is retiring and has been nominated to the board of Standard Oil Co. (N. J.), Humble's parent corporation.

MORGAN DAVIS

Davis, 58, became heir apparent last May when he was upped to executive vice-president. He had been on the board since 1948 and a vice-president since 1951. A geologist with Humble for 32 years, Davis was made the first head of the company's exploration department when it was created in 1946.

Little change in operation is expected at Humble, with its board made up principally of company vice-presidents. The fact that Davis is a geologist, however (Baker and most of his predecessors were lawyers), seems to show new emphasis on oil reserves.

California Texas Oil Company, Ltd., a joint property of the Texas Co. and Standard Oil Co. of California, has a new chief executive officer, too. W. F. Bramstedt has taken that job and the title of chairman from retiring W. H. Pinckard. Executive V-P A. J. Singleton succeeds Bramstedt as president.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FORD MOTOR COMPANY
Birmingham, Mich. Indianapolis, Ind. Livonia, Mich. St. Louis, Mo. Wayne, Mich.

LATROBE STEEL CO.
Buffalo, N.Y. Detroit, Mich. Independence, Ohio

STORER BROADCASTING CO.
Atlanta, Ga. Birmingham, Ala. Detroit, Mich. Miami, Fla.

SUNSHINE BISCUIT, INC.
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INTERNATIONAL OUTLOOK

A BUSINESS WEEK SERVICE

Washington hopes for progress in the London disarmament talks.

U. S. officials figure the Russians may be ready for at least token arms control—as one means of pushing their own peace offensive. If leaders in the Kremlin could revive the Geneva spirit, they might gain time to carry out their plan for a basic economic reorganization at home (BW—Apr.6'57, p48).

Soviet military leaders also are worried at the prospect that Britain soon will have its own nuclear striking power. Beyond that is the probability that other nations, including Germany and Japan, will become nuclear powers some day.

Washington isn't expecting any dramatic disarmament moves. That just isn't in the cards so long as Moscow holds to its aim of world domination. Look what was happening this week outside of London, where the disarmament talks were about to resume. The Kremlin still was trying to eliminate Western influence in the Middle East. In Jordan, Soviet agents were working side by side with pro-Nasser forces to undermine King Hussein.

This is about the way U. S. officials rate the chances of Soviet agreement on specific arms limitation schemes:

- **A better-than-even chance for some agreement on reducing conventional armaments.** In this case, inspection and control machinery would be fairly simple. There is far less chance that the Russians will agree to a U. S. proposal for turning over conventional weapons, made surplus by force reductions, to international control.

- **Limited aerial inspection in Central Europe** has at least a fair chance of acceptance. The Russians have agreed to it in principle. Negotiations now center on how wide the inspection zone would be.

- **The most important new U. S. proposal is to halt production of nuclear weapons by Apr. 1, 1958**—under an international inspection and control system. This presumably would discourage new nations from entering the nuclear arms race. If it worked, it might pave the way for a plan to scale down existing stocks of nuclear weapons. **Washington doubts that the Russians are ready to buy this proposal now**, in part because it would involve an elaborate control system.

- **The U. S. also has a proposal for notification in advance and registration and observation of nuclear tests.** This would be a step toward banning tests altogether. **But the Russians have latched on to the test issue as a propaganda weapon,** and probably won't agree to water down **a useful, though** phony, propaganda theme.

There is no sign that Moscow is ready to negotiate seriously on withdrawing troops from Eastern Europe or on German unification. There was a vague reference to these problems in the conciliatory letter Premier Bulganin wrote last weekend to Prime Minister Macmillan. But neither London nor Washington believes Bulganin meant business.

In short, the main U. S. hope in the disarmament talks is to get agreement on some positive arms limitation measure, no matter how modest. This would keep the channels of negotiation open.

—•—

A wave of industrial mergers has hit British business. It is being pushed along by the continuing credit squeeze—and by the competitive challenge Britain will face in the proposed European free trade area.

Here are some of the important developments:

• **Courtaulds and British Celanese are joining to form the world's biggest artificial fiber group.** In announcing the merger, their boards said that one of the objects was to meet the more competitive conditions to be expected—both in Britain and in Europe—under the free trade plan.

• The Hawker Siddeley aircraft group has just bought out Brush Engineering, an important combine of gas and diesel engine producers. Hawker Siddeley has plenty of money and research facilities, but it is losing military aircraft business under the new British defense plan. Brush Engineering has plenty of plant space, but is short of capital. Together they will go into the nuclear engineering field.

• Two big radio and TV manufacturers—Ferranti and Electrical & Musical Industries Ltd.—have given up making their own receiving sets in order to concentrate on capital goods. Ferranti will put more emphasis on power station and radar equipment, while its radio and TV sets will be made by EKCO. EMI is making the same kind of shift so that it can use plant space and working capital for increased output of electronic control instruments and other capital goods.

Chancellor of the Exchequer Thorneycroft has decided to set up an independent committee of inquiry into Britain's money and credit system. This has produced the same kind of controversy that followed suggestions for a money probe here in the U. S.

There has been no argument in Britain over the choice of an independent chairman. He is to be Lord Radcliffe, a former judge who has been chairman, since the war, of a royal commission on taxation.

The argument is about the extent of the inquiry. Should it limit itself to the effects of high interest rates and tight credit? Or should it open up the explosive subject of dual control between the Treasury and the Bank of England?

Critics of the government, and of the Bank of England, want the probe to be as wide as possible. If they succeed, the upshot may be as historic as that of the Macmillan Report of 1931, which was largely written by John Maynard Keynes.

—•—

Congress, at this session, will not approve U. S. membership in the Organization for Trade Cooperation. In fact, the OTC bill may not even get out of committee. That's the nearly unanimous verdict on Capitol Hill.

OTC is supposed to administer and police the General Agreement on Tariffs & Trade (GATT), which has been the framework for U. S. foreign trade policy during most of the postwar period.

If OTC goes by the board this year, the real test of the Administration's foreign trade policy will come a year from now. At that time, the Trade Agreements Act will be up for renewal.

—•—

The Suez dispute now is back in the United Nations Security Council. There the U. S. will bring up Egypt's latest terms, published this week. These terms still don't satisfy the U. S.—much less Britain and France.

But diplomatic dickering is academic at this stage. The first U. S. flag vessel entered Suez just as the Egyptian terms were published—and Western ships will be using the canal regularly.

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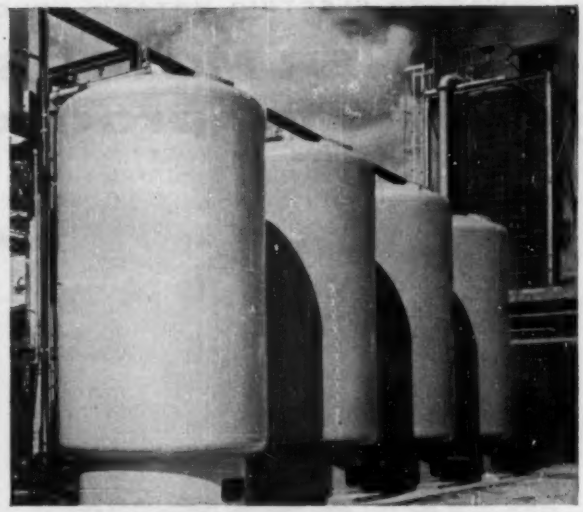

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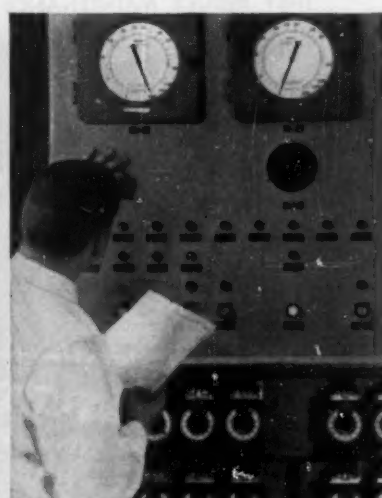

AUTOMATIC CONTROLS to ensure optimum results are designed, assembled, wired and tested by Permutit.

In Washington

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Government's Money Lending Shop Replenishes Its Cash Inventory

Congress finally refilled the coffers of the Small Business Administration, and as a result nearly 500 businessmen are counting on getting their government loans within the next few weeks.

The money-lending shop has been bone-dry for the last couple of months, but even so it kept on "processing" applications. The agency sent dead-pan notices to applicants that their loans had been O.K.'d, but that congressmen hadn't seen fit to replenish the lending account. **By the time the $45-million was deposited to its account, SBA had earmarked $25-million for borrowers who had already qualified.**

Officials privately admit that their lending rate practically guarantees that SBA will run out of funds again before June 30, when its two-year temporary charter expires. By then, however, SBA expects to have been made a permanent agency of government by act of Congress. Up to now, it has loaned out about $300-million.

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Atom Smasher Can Create More Artificial Elements

The first of the Atomic Energy Commission-authorized heavy ion linear accelerators went into operation this week at the University of California's Radiation Laboratory at Berkeley.

The Berkeley machine, nicknamed the HILAC and built at a cost of $1.7-million, was designed for synthesis of and study of elements heavier than uranium. The new instrument—though it has lower energy than many existing machines—is important because it is capable of accelerating heavy nuclei such as nitrogen atoms to energies of 140-million electron volts. That may permit the synthesis in one stop of elements above mendelevium (element 101 in the periodic table).

Also, the HILAC will be used to study the effects on living cells of very heavy nuclear particles, such as will be encountered when man ventures into outer space.

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Court Turns a Deaf Ear To Distiller's Plea for Tax Relief

Distillers are stuck with the law that requires payment of a $10.50 per gal. tax on spirits after the whiskey has been held in government bonded warehouses for eight years. Under this so-called force-out provision, distillers must pay the tax on the due date, whether they actually remove the whiskey from the warehouse or not.

Schenley Industries, Inc.—through two subsidiaries, Schenley Distillers Co. and Joseph S. Finch & Co.—took its long-time fight against the "force-out" tax to the Supreme Court (BW—Dec.29'56,p92). **Schenley attacked the provision as unconstitutional, and told the High Court that there is no present market for millions of gallons of whiskey now approaching the force-out date, consumption being less than was estimated when the whiskey was produced.** Finch said that paying the tax and holding the whiskey for a future market would be "economically prohibitive," forcing it to destroy, redistill, or export a lot of whiskey at a big loss.

Schenley's protests fell on deaf ears. This week, the U.S. Supreme Court, without a written opinion, upheld a ruling made last year by a special three-judge court, dismissing Schenley's suit and upholding the tax.

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Producers Will Unload on Uncle Sam As Private Aluminum Markets Shrink

Aluminum producers have asked the government to buy 200,000 tons of primary aluminum at the current market price of 25¢ per lb., to make up the difference between booming aluminum production and lagging demand.

The producers are exercising so-called clauses in their government contracts, which require the government to buy up to certain percentages of plant output (up to 100% in some contracts), if the producer has no private market for his product. These clauses, which run out after 1958, reflect government incentive programs to encourage capacity boosts during the Korean War.

Up until last fall, aluminum demand was outstripping supply, and all major producers announced ambitious expansion plans. However, the current dip in automobile and consumer hardgoods output has dropped demand under 1957 estimated supply by about the 200,000-ton figure.

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Justice Dept. Splits Over Probe Into Oil Marketing Practices

A major difference of opinion has erupted within the Justice Dept. as to whether the government is properly guiding the investigation by a federal grand jury in Alexandria, Va., into oil marketing practices.

Horace Flurry, a veteran attorney of 16 years in the Antitrust Div., quit in a huff. **Flurry charged that the success of the inquiry is threatened by "unwise procedures" dictated by department higher-ups against the advice of working-level attorneys in the case.**

Flurry says that the result not only will be delayed, but will harm the Justice Dept. in the eyes of the grand jury members, the courts, and the oil industry itself—which he says is convinced that the government is on a "fishing expedition." The departing attorney also says that small concerns within the oil business won't be inclined to cooperate with the grand jury if they feel the government itself may not be "serious about what it is doing."

LABOR

USW's Rebuff to Its President

Official canvass shows McDonald was re-elected by 2-to-1 margin, but this connotes strong rank-and-file opposition. This means serious loss of prestige for McDonald, and possible labor-management difficulties.

DAVID J. McDONALD will serve another four-year hitch as USW president; beyond that his future is uncertain. Employers respect him, but USW rank and file is wary.

THE UNITED STEELWORKERS last week officially named David J. McDonald to a second four-year term as president—but by such a relatively thin margin that his reelection could mean new and troublesome pressures on both McDonald and the steel industry.

The reelection of USW's silver-haired, pipe-smoking president has been a recognized fact for two months (BW—Feb.16'57,p162). So has the heavy protest vote cast against him in steel centers across the country. But, until a week ago, when the Honest Ballot Assn. certified the figures, nothing was official.

Many took a "wait-and-see" attitude. Now, with McDonald returned to office by slightly less than a 2-to-1 margin over Donald C. Rarick, a rank-and-file millhand, the possible far-reaching effects are receiving close study.

• **Uncertain Future**—McDonald's future in USW is now uncertain. When he should have been at a peak of popularity—after a 1956 strike that brought what the union describes as its "greatest victory"—the Steelworkers' leader has been sharply rebuffed by a substantial part of his union. His victory and another term in his $50,000-a-year job give him little to be happy about. The man he defeated had no union reputation or standing, and only the little money he could collect at rallies; McDonald had the strongest kind of organized support and a well-filled treasury that could be—and was—tapped in his behalf.

Under the circumstances, McDonald's 404,172-to-223,516 vote victory is really a poor showing and points to an inescapable conclusion: Any USW executive board member, or anyone else in the union with national status, could have toppled McDonald from office. Reelected, McDonald now has four years to win USW's rank-and-file backing. But so have those who opposed him this election—and got 36% of the vote.

• **Repercussions in the Industry**—This could have important repercussions in labor-management relations in the steel industry. Employers are already glumly reassessing their prospects for continued peace and harmony. When Philip Murray died in 1952, they gambled on McDonald as his successor, with contract and other concessions given to build up his stature in the union. Some are frankly disturbed by the weakness of his position.

McDonald has not been "soft" in his bargaining or contractual relations with employers. Employer liking for him grows out of a high regard for him as a leader who insists, once a contract is signed, on strict adherence to its terms. Under McDonald, once-obstreperous relations in industry's mills have calmed considerably; there are few wildcat strikes or slowdowns now, and if they do occur McDonald can be counted on to end them quickly and in line with existing labor agreements.

The question now being asked in industry offices is: Will McDonald, aware of his vulnerability, put aside his chosen role of union statesman and become more militant? It could happen—and it will if close associates of McDonald have their way. They envision him as a more down-to-earth fighting leader.

But even if McDonald clings to his policy of "mutual trusteeship"—which recognizes the full responsibilities of a union to management—troubles may be ahead for the union-employer relationship. The vote against McDonald originated in local unions. The fight

against him can be expected to go on at that level, and it will involve pro-McDonald local leadership and anti-administration slates.

This type of political struggle can't be kept out of the mills. It soon becomes a factor in grievance handling and in issues that weaken morale and, quite possibly, lead to stoppages.

So, the industry may have received a serious setback along with McDonald.

• **Broad Significance**—The significance of the vote in the steel union isn't limited to USW and the industries in which it operates. There are also broader, but more intangible, aspects.

For instance, the heavy protest vote against McDonald is recognized in labor as a strong, almost spontaneous rank-and-file movement set off by dissatisfaction with existing conditions. With only nebulous organization, it was able to rock a strongly entrenched leadership.

The meaning of this will hardly escape other leaders—including the Teamsters' Dave Beck—who are or might be caught up in the spreading war on racketeering and corruption in unions. Their rank-and-filers have more provocation than the USW local membership, whose fight was mainly over the way a dues increase was put through by the steel union leadership at a convention last year.

A rank-and-file revolt against Beck and other International Brotherhood of Teamsters leaders is already under way. It is now minimized in much the same way that the steel unionists' fight against McDonald was a few months ago. But with the graver reasons for revolt, and given some centralized leadership, the Teamsters rebellion could become a dramatic and successful one.

• **Election Procedures**—However, the battle in the Teamsters will be harder to win. USW elects its officers by referendum vote, the IBT through delegations at its conventions. The difference is important, and it is one that has caught the attention of the Senate Select Committee. In its probing into corruption in labor, the committee has become concerned over lack of democratic processes and rank-and-file participation in union business.

This has led, inevitably, to talk of legislation to guarantee individual unionists a voice in the election of officers.

Union staff people frequently control convention actions. Business agents and others who owe their bread and butter to the Teamsters administration will have a big voice in the IBT's fall conclave. This isn't a practice that exists only in the Teamsters. It is an important factor in the virtual perpetuation of the executive leadership in many other unions.

Under the election systems of most

unions, McDonald undoubtedly would have won election by an overwhelming vote. Delegates would have voted their locals routinely, as blocs. Any protest vote would have been stifled. But under USW's democratic referendum plan every member can cast a ballot that counts in a national total. In the last election, only a little more than half did. Nevertheless, a hefty opposition vote mounted against McDonald.

This won't be overlooked on Capitol Hill. There is already talk of new laws to require, among other safeguards of union democracy, elections by referendum vote (page 157).

- **AFL-CIO's Concern**—However, if action comes along this line it might be from AFL-CIO, not Congress. The federation, hoping to escape federal regulation, is considering an addition to its codes of ethics to require elections by popular referendum vote.

Among others, Walter Reuther—whose United Auto Workers convention recently reelected him by acclamation—reportedly favors the suggested AFL-CIO guarantee of fair elections.

- **Reuther vis-a-vis McDonald**—The hearty backing given Reuther in UAW is particularly galling to McDonald, who for years has been at odds with the auto union's redhead. The recent UAW convention faced the same two critical issues that led to the rank-and-file revolt in the Steelworkers: administration proposals of a dues increase and a salary boost for officers and staff.

In the UAW, as in the steel union, there was opposition to these proposals, but both were adopted. Then why did McDonald run into trouble and Reuther stay out of it? The answer is largely the personalities of the men.

- **Still in Touch**—Reuther has his critics but he is a popular figure closely identified with his union's rank-and-filers. He came up through the ranks and has never lost touch with the men in the plants and local unions. Although he calls all the shots in UAW, the targets are popular.

If anyone thinks differently, Reuther allows opportunity for debate. Although it was obvious that close to 90% of the delegates to UAW's Atlantic City assembly favored administration proposals, up to three hours of floor argument on each issue preceded voting.

- **A Man Apart**—McDonald, on the other hand, lacks rank-and-file association. In dress, appearance, and theatrical mannerisms, he is alien to the men in the mills. Many of his ideas of mutual trusteeship, people's capitalism, and labor statesmanship are just as foreign to them. Although few criticize McDonald's bargaining record, which shows very substantial gains won for plant workers, many still feel the advances were made in too-cozy bargaining with the industry; even

the strike last year didn't abate a widespread wariness of McDonald's relations with industry people.

When McDonald advocated a dues increase last year and a boost in his salary to $50,000 many delegates rebelled. They failed to get the opportunity they demanded for a full airing of their objections. In their locals, back home, they charged McDonald had "railroaded" the proposals.

• **Loss of Influence**—The fight to unseat him in the referendum this past February developed out of that resentment. Although the effort failed, it has had important bearing on McDonald vis-a-vis Reuther and in the labor movement as a whole.

As unchallenged leader of the nation's third largest union, McDonald occupied a position of considerable importance in AFL-CIO. He still does, on paper. However, the man who has been widely considered a counterbalance to Reuther, a conservative checkreining a progressive, has lost prestige and with it influence. Until—and unless—he shows signs of increasing power in his own union, he will not have it in AFL-CIO.

A Presidential Spur for Labor Reforms

Eisenhower-Mitchell conference boosts chances for legislation to curb racketeering—at a time when AFL-CIO's clean-up drive is heading into legal roadblocks.

Pres. Eisenhower this week personally boosted the chances for reform legislation based on labor racketeering revelations coming from Congress.

A hurried conference at Augusta, Ga., between Eisenhower and Labor Secy. James P. Mitchell put new weight behind the growing sentiment for greater control over union funds. The meeting might well result in some special White House recommendations to Congress during the current session.

• **AFL-CIO Difficulties**—The Eisenhower-Mitchell conference becomes even more important in view of the troubles besetting the AFL-CIO's own clean-up program. New legal maneuverings by officials of the International Brotherhood of Teamsters may stall the hoped-for housecleaning and therefore make new legislation more likely to fill the vacuum.

Until now, the Senate committee chaired by Sen. John McClellan (D-Ark.) has confined its activities more or less to the investigation itself, which focuses next on Teamsters Pres. Dave Beck and the union's activities in New York City. It has taken a position, unofficially, that recommendations of reform laws should wait until the investigations are completed—possibly in a year. This week, however, McClellan indicated that a start might be made on a legislative program this year, "possibly by June."

• **Possible Reforms**—The President has suggested Congressional action on welfare fund abuses several times since 1954, and such a bill is now under consideration on Capitol Hill. There's talk of broadening it, with bipartisan support, to include legal requirements that (1) all unions issue public reports on funds; (2) earnings and expenses of union leaders be wide open, to avoid secret borrowing such as admitted by Dave Beck, and (3) election processes be corrected to insure rank-and-file participation (page 153).

Despite the added impetus given reform proposals by the Augusta conference, new laws are still considered unlikely this session. However, the President's summoning of Mitchell made the growing problem in the way of the AFL-CIO's clean-up efforts all the more frustrating. Mitchell had been studying possible legislation, since the hearings began but union leaders were not anticipating anything this soon.

Labor is less afraid of what Mitchell might propose than it is that an Administration program might get out of hand in Congress, particularly if labor's own clean-up program is slowed down by skirmishes with the Teamsters.

• **Legal Tug-of-War**—The chances that AFL-CIO leaders can compel clean-up results within the Teamsters are not good. The fight is now tangled in a legal tug-of-war. In almost every phase of the federation's troubles with the trucking union, the slow-moving processes of the court room are either real or threatened:

• Beck is embroiled in exchanges with the AFL-CIO top command over the federation's coming trials of himself and his union (BW—Apr.20'57, p154). He intimates that he may seek a court injunction to win back his seat on the AFL-CIO executive council. And he challenges the AFL-CIO Ethical Practices Committee to submit written charges against the union prior to its hearing May 6.

• In District Court in Washington, James R. Hoffa is seeking either dismissal of the indictment charging him with bribery of a Senate rackets investigator, or, in the event that fails, a six-month delay in his trial because of the publicity surrounding the Congressional hearings.

• Four other Teamsters officials—including West Coast leader Frank Brewster and Vice-Pres. Einar Mohn, Beck's assistant, asked the U. S. District Court to dismiss contempt of Congress charges arising out of their refusal to testify before a Senate committee. While this is not an issue in the federation, a decision either way could add or subtract from the AFL-CIO program to force the Teamsters' hand.

• **Mutual Determination**—AFL-CIO Pres. George Meany is not bothering with Beck's legal challenges. The federation hearings on Beck and his union are going ahead regardless. For their part, the Teamsters officers are showing no willingness to participate in the trials.

AFL-CIO officers warn that it isn't enough to chastise the Teamsters. Rather, they feel, the Teamsters leadership must go if the truckers' union is to remain in the federation. And on this count the legal maneuverings play a crucial part in the clean-up campaign.

A court victory in his favor would permit Beck to go before the Teamsters convention next September in a stronger position to seek reelection. However, many union leaders feel that Beck won't run—despite what he says now. Beck's executive board has little enthusiasm now for its president, and his rank-and-file support is waning.

As for Hoffa, a delay in his trial that would leave his fate undecided until fall would keep him in a strong position at the union's September convention. Although Hoffa might not run himself if charges still stand against him, he might have the final word on who does run—and win.

• **Practical Problems**—The big worry of federation officers—including Meany, Walter Reuther, and Al J. Hayes, head of the Ethical Practices Committee—is that the AFL-CIO might not be able to keep the Teamsters in the federation if Hoffa is in the driver's seat.

Both Reuther and Hayes have made pointed note of their desire to avoid kicking out the Teamsters. For one thing, they feel that would penalize the membership for unethical actions of its officers. And, looking at the problem realistically, they do not like the prospect of a giant independent union that might well turn on AFL-CIO unions in revenge (BW—Apr.6'57, p50). END

Usurers Beware

A New York ILA local teams up with a bank to free its waterfront workers from the loan sharks.

When special investigators first delved into the crime situation on the Port of New York waterfront several years ago, they found a sordid picture of gangster control. A major problem facing longshoremen, and one that was in large part responsible for their being under the mob's thumb, was the loan shark racket.

Because of the casual nature of dock employment, a longshoreman is often regarded as a poor credit risk. For this reason, dock wallopers have always turned to loan sharks for ready cash. These usurers charge a standard repayment rate of $6 for every $5 borrowed. Hence, "6-for-5-boys" is one of the more printable expletives longshoremen apply to loan sharks.

Last week, a union—Local 856 of the International Longshoremen's Assn.—and a bank—the American Trust Co. of New York—announced a plan aimed at driving exorbitant lenders from the section of waterfront under the union's jurisdiction.

• **Pool of Cash**—The plan calls for the union to make available to its members a total of $10,000 borrowed from the bank. Any member approved by the union can borrow up to $200. Fred Field, Jr., the local's secretary-treasurer, says union borrowers will pay 6% on the unpaid balance of the loan, or about $3.90 a year on $100—the same rate the union paid the American Trust Co.

Since the union, not the bank, will handle the administration of the loan applications and the actual lending, the whole idea will cost Local 856 some money. The bank doesn't stand to make a great killing off this small deal either, although it reports some nibbles from other unions. The point is, according to Field: "We don't want our members to be subjected to the pressures of these loan sharks. When a man is in their debt, his mind's not on his work. He's a safety threat—not only to himself but to those working with him."

• **Common Problem**—As the union is quick to point out, the loan shark is not peculiar to the waterfront. Usury rings flourish wherever there are large groups of people—in office buildings, factories, even in neighborhoods.

One labor attorney in New York remarked that the plan's aim is fine. But, he mused, the fact that the union can make the loan, instead of the bank, gives local officers a powerful hold over the rank and file. **END**

In Labor

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AFL-CIO Urged to Set Up Union For Drive in Nonferrous Field

The AFL-CIO Nonferrous Metals Council last week called on the federation to charter a new union to wrest bargaining rights from the independent Mine, Mill & Smelter Workers—expelled from CIO in 1949 as Communist dominated.

MM&SW was developed in the old AFL from the Western Federation of Miners, later shifted to CIO in the surge of industrial unionism. **Since expulsion, the union has continued to be the dominant union in the nonferrous industry, claiming 100,000 members and holding contracts with leading companies. It has successfully resisted take-over efforts by the United Steelworkers and other unions.**

Mine-Mill's biggest problem is with the government, which has asked the Subversive Activities Control Board to declare the union to be Communist infiltrated—and therefore ineligible for the protective coverage of federal labor law. The board recently concluded hearings in Washington, will open a new phase of its inquiry in Denver early in May.

If the board acts against Mine-Mill, and makes it more vulnerable to raids by other unions, the United Steelworkers will increase its organizing work. The Nonferrous Metals Council meeting held in Denver took note of this.

Nonferrous metal miners have always had a separate organization or craft and want to maintain their identity, the council advised the AFL-CIO. It protested that unless a new nonferrous union is established, "local metal trades councils . . . in the nonferrous industry will become extinct."

The petition will be placed before the AFL-CIO executive council in Washington May 20. **USW is expected to oppose the request for a separate nonferrous union and to claim the jurisdiction.**

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Many States Liberalize Jobless Pay Programs

Pres. Eisenhower, in his economic report this year, urged state legislatures to fix unemployment compensation benefits at one-half of a worker's regular earnings and to set the maximum duration of these payments at 26 weeks or more.

Spurred in part by this call for action, lawmakers in 12 states have increased benefits; some 20 more are likely to follow suit. Topping the list of increases is Idaho, which raised its UC maximum from $30 to $40. **Another hike came in Nevada where the maximum went from $50 to $57.50 for a worker with four dependents.**

Commerce Clearing House, a tax and business law reporting service, observes that about half the states now have the 26-week maximum, but only six apply it to all unemployed workers as suggested by the President. Colorado, Missouri, Montana, and Wyoming have lengthened benefit durations this session, while several other states are considering similar changes.

In all, 22 states already have made some changes in their unemployment insurance laws this year. Not all deal with size or duration of benefits. Indiana, for example, voted to make workers receiving private supplemental unemployment benefits ineligible for UC, while Colorado altered its law to allow for payment of UC to workers receiving private benefits.

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UAW Wins One Labor Board Vote Of Craft Group, But Loses Another

The United Auto Workers last week won a bargaining election among tool room employees in General Motors' new Fisher Body stamping plant at Marion, Ind., defeating an independent craft union 463 votes to 122.

The auto union hailed the National Labor Relations Board victory as "overwhelming endorsement of the new [skilled trades] collective bargaining policy . . . adopted by UAW's recent convention (BW—Apr.20'57,p153).

However, in a less-publicized NLRB election last week UAW lost (573 to 475) in a vote covering office and technical employees of Temco Aircraft Corp.'s Grande Prairie (Tex.) plant.

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Labor Briefs

The government's monthly cost of living index went up to 118.9% of 1947-49 average prices in mid-March. It was the seventh straight high, and meant raises for nearly 1.5-million workers under "escalator" contracts. The largest group, railroad workers, got 3¢ an hour increases (BW—Apr.20'57,p161). The food index dropped from 113.6 to 113.2; clothing rose sharply from 106.1 to 106.8, and housing and other index factors showed smaller rises.

Chrysler Corp. can schedule overtime work again now that a five-week strike at the company's Los Angeles plant has been settled. The United Auto Workers this week rescinded a ban on Chrysler overtime (BW—Apr.13'57, p157) after an agreement on work standards at the plant.

Ohio Consolidated Telephone Co. was blamed last week for violence during a 228-day strike by the Communications Workers of America. A National Labor Relations Board trial examiner ruled that violence started after "comparative peace" when the company "brought in strangers—who stood around job sites without working —an invitation to violence," and when a company supervisor drove a truck into a striker. The trial examiner recommended that NLRB dismiss charges against CWA.

The International Longshoremen's Assn. plans an all-out drive to seize control of Great Lakes docks from the rival AFL-CIO International Brotherhood of Longshoremen. The Teamsters probably will work with ILA—despite federation disapproval.

THE MARKETS

Wall St. Talks . . .

. . . . about snuff and pretzels . . . bond prices . . . investment trusts . . . chemical industry yields.

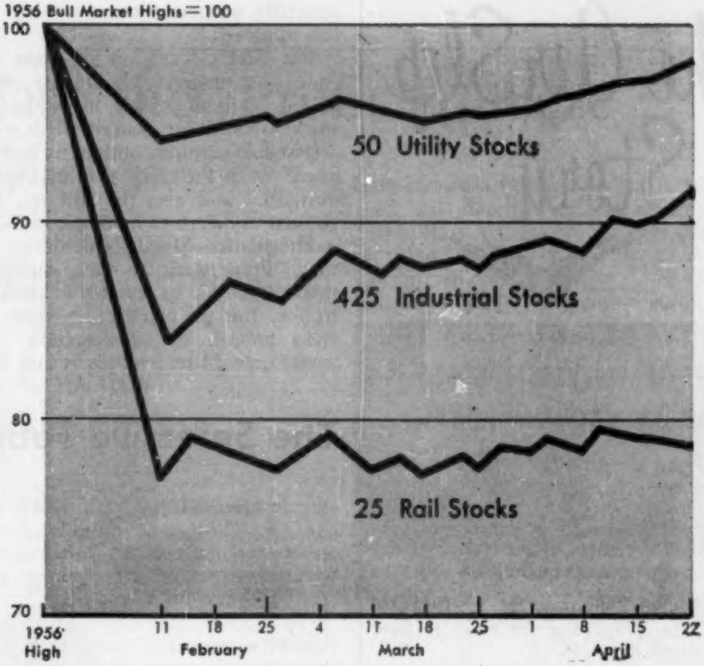
The diversification trend is spreading into the tobacco business and in the process it's touching off some strange marriages. For example: George W. Helme Co., leading snuff maker, is about to lead a pretzel baker to the altar.

Bond prices keep slipping: (1) Long-term Treasuries early this week slumped to their lowest levels since mid-January (page 49). Only 89 5/16% of par was then being bid for the Victory loan 2 1/2s, only 91 3/4% for the 40-year 3s, only 97 1/16% for the 3 1/4s. (2) Dow-Jones municipal bond yield index (which moves inversely to prices) was up to 3.20%, not far under the 3.29% 30-year high it registered in late December. And New York City on a new borrowing was forced to pay a net interest cost of 3.45%, highest rate it has been assessed since 1936. (3) Over-the-counter, only 99 7/8% was being bid for the American Tel. & Tel. 4 3/8s recently offered publicly at 101 1/4%; only 97 1/4% was bid also for the World Bank bonds offered last week at 98%.

Biggest AT&T stockholder of record is still the Street's huge "general store" —Merrill Lynch, Pierce, Fenner & Beane. At yearend 591,893 shares were registered in its name.

The concord fund, one of the investment trust trade's smaller units, in the first quarter sharply hiked its holdings of cash, short-term notes and government bonds. Such investments now account for 65% of its portfolio compared with only 40% as 1956 ended. This substantial increase in liquidity, the fund reports, reflects worries over the possibility of "a declining trend of business sales accompanied by a shrinkage in profit margins" in the next few months. Also, despite the drop earlier seen in common stock prices, "the general market," the fund adds, "still appears to be high on the basis of historical price-earnings ratios and dividends."

Higher costs and other factors, Standard & Poor's says, are causing changes in some of the chemical trade's old rule-of-thumb yardsticks. While the industry once figured that $1 of capital expenditures would generate $1 of annual sales, it now believes that the sales return is only around 80%.



Data: Standard & Poor's.

"Fear" Spurs the Rise

Return of inflation worries helps keep stock prices going strong. Optimistic talk by industrialists also gives a push.

MIDWEEK found the Wall Street bulls in their highest spirits for a long time. And their glee was stoked by solid fuel.

Monday started things with a rather selective advance. On Tuesday, the Big Board put on one of its most convincing performances. There were 535 individual advances for the day against only 372 declines; 101 issues climbed to new 1957 highs, while only 35 sagged to lows for the year. And on this meat was rich gravy: Volume for the day was the second largest in 1957.

Things quieted down on Wednesday, after a strong first hour, as profit-taking knocked down prices a bit. But on balance these sales were absorbed in good style; trading tended to contract whenever selling was rife, then to pick up again as the upward move resumed.

• **Impetus**—Street opinion finds a variety of causes for the new flare-up of optimism. Notable among them is a moderate return of those inflationary fears that had been calmed down earlier. Announcement last week of the seventh straight monthly rise in the cost-of-living index gave the impetus to the new fears.

Considerable weight is also given to the very numerous optimistic statements about 1957 prospects that business leaders have been issuing. Many brokers feel that these statements have taken much of the sting out of morose first-quarter earnings reports (page 111), and so inspired investors and traders to get on with their buying.

Still another factor is the spate of rumors rattling around the Street concerning favorable corporate developments that are expected to be announced soon. Thus on Tuesday one issue climbed 10%— or about $6 1/2—in the wake of stories that (1) it was going to get a fancy price for some of its foreign operations, and (2) that it would soon announce a very advantageous merger.

• **Pros Stay Aloof**—Up to now, there are no signs that the professional money managers are being stampeded into the herd of bulls now claiming that "this is it." Most of the pros remain cautious, content to:

• Ride with their present common holdings through any rough waters that may lie ahead.

• Postpone any important buying operation until after the sharp price drops that they believe are sure to come.

The pro investment counselors are following pretty much the same line, though in varying degrees.

This week, Standard & Poor's said that "the possibility of further rally is not to be ignored, and [that] prospects

generally warrant a conservatively bullish approach."

But S&P's went on to warn that "adequate reserves should be maintained, and any fresh investment in stocks should be concentrated where a favorable earnings outlook is well defined"—with the stress on "selected industrials," and also the utilities, long popular as defensive holdings.

• **Irregularity**—Moody saw things this way: "From week to week, individual stocks stand out as reasonably attractive to buy. But the market as a whole still lacks appeal, in our opinion. We would expect later irregularity and lower prices." And Moody believes that stock investment programs "should remain deliberate and selective as concerns buying."

If you wonder why so many Streeters—even the bullish—and pros continue to stress selectivity, take a look at the tabulation below. In the rally that started in mid-February, S&P's daily index of industrial stock prices has risen about 8.7%. But much of this rise seems to have been caused largely by a rather small number of the many stock groups that make up the index. And the 1,100-odd commons listed on the Big Board have been equally selective.

The Selective February-April Rally:

Stock Group	*1956 High*	*Feb. '57 Low*	*Recent Level*	*Recent Level vs. 1956 High*	*Recent Level vs. Feb. '57 Low*
Drugs	24.46	22.13	26.27	+ 7.4%	+18.7%
Office, business equipment	121.90	113.90	130.49	+ 7.0	+14.6
Electrical equipment	54.01	45.79	51.84	− 4.0	+13.2
Oil—international companies	85.78	74.16	83.61	− 2.5	+12.7
Aluminum	179.00	120.90	134.64	−24.8	+11.4
Radio-TV, electronics	68.02	45.82	50.99	−25.0	+11.3
Carpets, rugs	16.53	15.03	16.68	+ 0.9	+11.0
Sulphur	42.20	34.68	38.38	− 9.1	+10.7
Metal fabricating	60.18	48.19	53.07	−11.8	+10.1
Food chains	38.58	34.47	37.76	− 2.1	+ 9.5
Machine tools	41.16	31.52	34.35	−16.5	+ 9.0
Finance companies	44.80	40.46	44.07	− 1.6	+ 8.9
Copper	43.65	31.70	34.45	−21.1	+ 8.7
Mining, smelting	43.81	38.49	41.74	− 4.7	+ 8.4
Machinery—industrial	68.93	57.76	62.26	− 9.7	+ 7.8
Confectionery	19.20	17.35	18.59	− 3.2	+ 7.1
Auto parts, accessories	34.70	30.64	32.82	− 5.4	+ 7.1
Fertilizers	50.05	37.42	40.06	−20.0	+ 7.1
Motion pictures	31.98	27.89	29.63	− 7.3	+ 6.2
Railroad equipment	22.63	20.54	21.77	− 3.8	+ 6.0
Machinery—specialty	22.40	20.47	21.68	− 3.2	+ 5.9
Tires, rubber goods	137.60	121.60	128.80	− 6.4	+ 5.9
Chemicals	52.30	40.62	42.93	−17.9	+ 5.7
Oil-integrated co.': domes	71.43	59.94	63.27	−11.4	+ 5.6
Rayon, acetate yarn	40.08	27.31	28.72	−28.3	+ 5.2
Oil—crude producers	161.20	142.10	148.89	− 7.6	+ 4.8
Autos	60.04	49.59	51.91	−13.5	+ 4.7
Distillers	54.40	49.81	51.77	− 4.8	+ 3.9
Soaps	32.08	26.05	27.06	−15.6	+ 3.9
Food companies	25.85	22.97	23.85	− 7.7	+ 3.8
Agricultural machinery	22.35	20.86	21.63	− 3.2	+ 3.7
Department stores	50.30	40.75	42.25	−16.0	+ 3.7
Lead, zinc	15.80	12.23	12.65	−19.9	+ 3.4
Soft drinks	15.12	12.31	12.67	−16.2	+ 2.9
Cigarette manufacturers	15.44	14.18	14.57	− 5.6	+ 2.8
Cigar makers	24.41	23.07	23.72	− 2.8	+ 2.8
Steel	74.74	62.60	64.21	−14.1	+ 2.6
Textile weavers	27.59	21.36	21.86	−20.8	+ 2.3
Machinery—construction	71.35	65.49	66.62	− 6.6	+ 1.7
Vegetable oil	31.40	26.67	27.05	−13.9	+ 1.4
Aircraft manufacturing	74.38	64.06	64.75	−12.9	+ 1.1
5¢, 10¢, $1 chains	17.45	14.57	14.72	−15.6	+ 1.0
Coal—bituminous	102.10	85.14	85.94	−15.8	+ 0.9
Sugar	20.86	22.04	22.17	+ 6.3	+ 0.6
Shoes	20.87	18.22	18.23	−12.7	+ 0.1
Building materials	68.53	57.79	57.65	−15.9	− 0.2
Auto trucks	35.90	31.50	31.30	−12.8	− 0.6
Mail order, general chains	50.03	37.83	37.48	−25.1	− 0.9
Shipping	45.51	43.65	42.31	− 7.0	− 3.1
Paper	189.40	141.00	136.56	−27.9	− 3.1
Shipbuilding	47.36	44.47	42.88	− 9.5	− 3.6
Air transport	33.15	24.91	22.73	−31.4	− 8.8

DOW CORNING

SILICONE NEWS

Silicones Ease the "Profit Squeeze"

- Silicone lubricant for plastic parts smooths refrigerator sales
- Simplify production of oven thermometer with Silicone paint
- Silicone adhesive tape doubles for weld, doubles production, too

HELPING HAND FOR HARRIED PROFITS—Oft-heard complaint from businessmen today is that profits are slimming despite a diet of heavy sales. Rising production costs and product improvements frequently mean added expense that can't be passed along. But . . . by utilizing the varied forms of Dow Corning Silicones, many alert manufacturers are marketing better products with no increase in cost.

"SLIDER" PITCH—Now, Kelvinator refrigerator designers have licked the problem of sticking shelves, without throwing costs out of line, by lubricating plastic parts with silicones. The big new "Foodarama" boasts

smooth-sliding shelves and free-opening compartment doors that will keep the buyer pleased for years. Yet the silicone lubricants cost next to nothing. Dow Corning 200 fluid, for example, puts the slip on crisper covers at a cost of only six hundredths of a cent!

Unlike many oils, this silicone fluid is an excellent lubricant for plastic or rubber parts in contact with metal . . . an essential factor here. And silicones don't thicken when temperatures head for the deep freeze: another essential. In all, Kelvinator has added a pleasing new sales feature at practically no extra expense. No. 49

IT GETS THE BENDS, but not the breaks. That's the story of the silicone finish on this kitchen oven thermometer. The Taylor Instrument

Companies coat sheet stock with silicone-based paint before the metal is sheared, stamped and bent into the shape you see. Through all the punishment of the forming operations, the flexible silicone finish never chips or cracks.

Production-wise, pre-painting saves all kinds of costs . . . it's more expensive and difficult to paint finished units. Product-wise, Taylor finds there's no need to worry about discoloration at oven temperatures. The paint made with Dow Corning silicone resins by Stanley Chemical Company is recommended for up to 500 F . . . others will take as much as 1000F! Taylor gets a permanently attractive paint and a lower-cost production method . . . both due to Dow Corning Silicones. No. 50

SKIRTS TAPED ON— No Dior creations, the metal skirts that cover gas burners on hot water heaters. Generally, they are welded on. But White Products Corp. found that hand welding each skirt to the heater base caused a production bottle-neck with too much overtime resulting. Then they discovered a pressure sensitive tape coated with a Dow Corning silicone adhesive . . . a tape that completely eliminates welding!

The tape, made by Mystik Adhesive Products, is simply wrapped around the 48-inch joint where skirt meets heater base. It holds the two together with a grip like iron. Strong, waterproof, and exceptionally heat-resistant, the taped joint meets all tests of the American Gas Association. Result: a saving of 7c material cost per heater, and plant production doubled! No. 51

SYL-MER & MOHARA SUIT THE EXEC—Humidity that leaves you limp won't put a crimp in stylish

Joseph & Feiss suits of Mohara . . . now offered by over 1200 better men's stores. Three-season Mohara fabric is treated with Syl-mer*, Dow Corning's silicone finish. Syl-mer helps Mohara shrug off rain and stains, so it stays crisply debonair while other fabrics wilt. Syl-mer results in a smoother, better-feeling fabric, too—one that requires less upkeep. Makes good fabrics even better with little or no extra cost! For more information about Syl-mer and name of nearest Mohara retailer, circle . . No. 52

*TM Dow Corning Corporation

FOR MORE INFORMATION on silicones used in these applications, circle reference nos. in coupon.

first in Silicones

DOW CORNING CORPORATION

MIDLAND, MICHIGAN

DOW CORNING CORPORATION, Midland, Michigan
Dept. 2216

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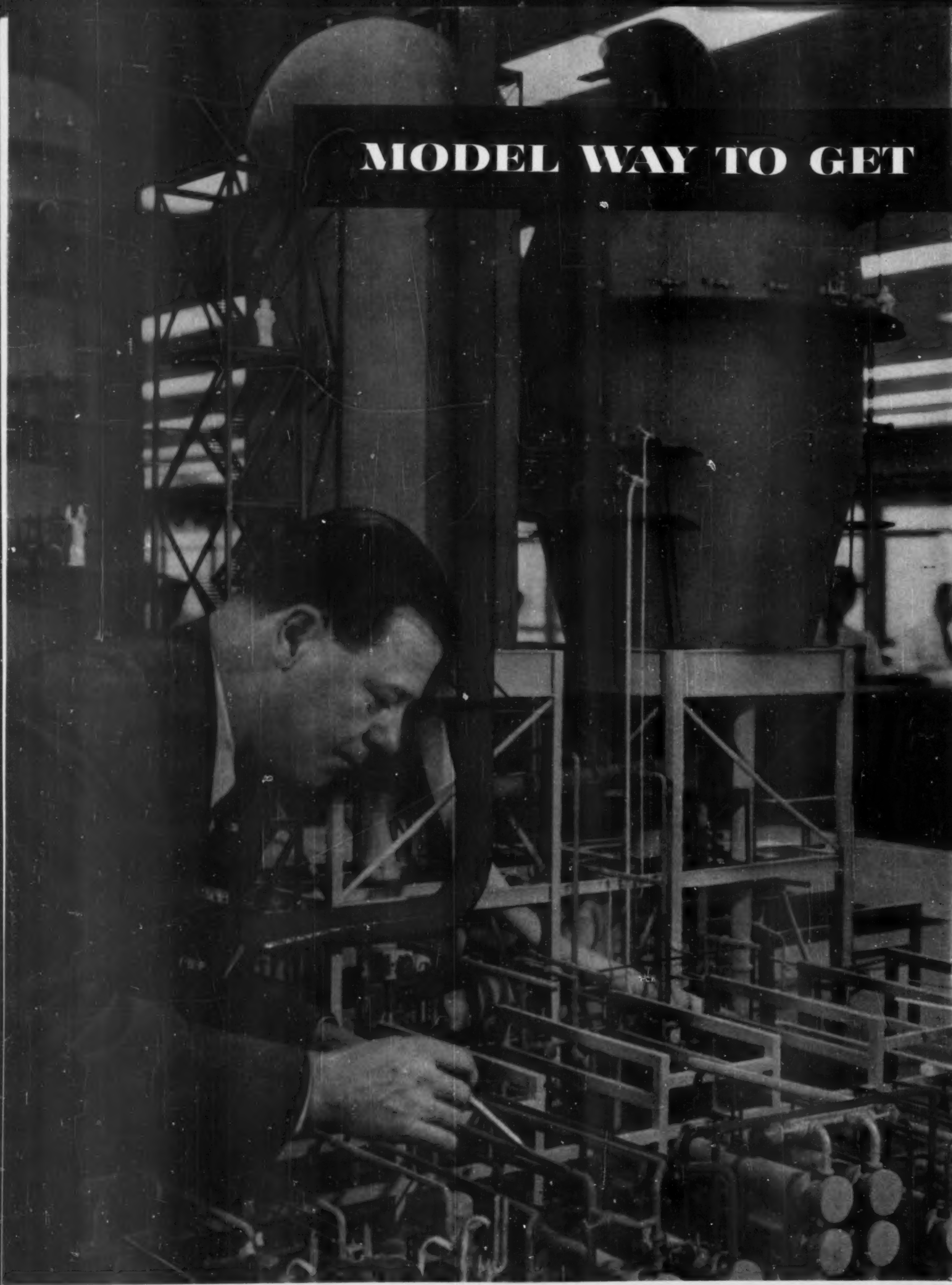
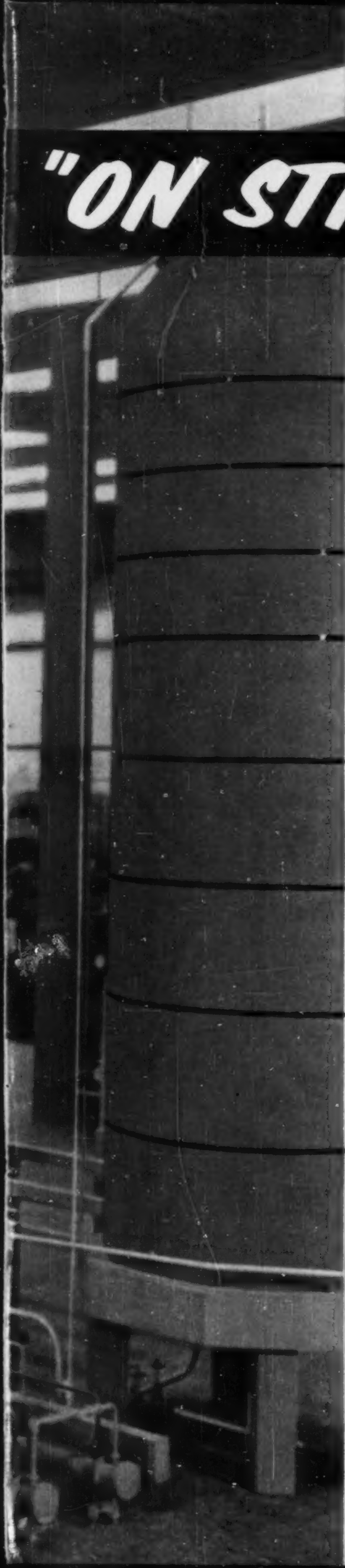
MODEL WAY TO GET





"ON STREAM" FASTER

Warren L. Smith, President of The M. W. Kellogg Company, Tells How Business Magazines Help

"In designing and building petroleum refining and petrochemical plants, one of our primary aims is to get 'on stream' as rapidly as possible. During all stages, from first talks to completion of construction, we constantly draw on our knowledge of new technical developments and engineering advances in many related fields.

"In this, business magazines are an important source of information to our engineers and executives. From their regular reading, they currently receive new and important ideas and information."

At The M. W. Kellogg Company, 629 Men Pay To Read One Or More McGraw-Hill Magazines

Readers of McGraw-Hill magazines control the specifying and buying practices for markets measured in billions of dollars. Your advertising, concentrated in these magazines, is advertising at work. It augments and strengthens your salesmen's efforts . . . both before and between calls.

Whatever products or services you sell to business and industry, you will find that one or more of the 33 McGraw-Hill magazines can help make your sales program more productive and profitable.

McGraw-Hill Magazines

McGraw-Hill Publishing Company, Incorporated
330 West 42nd Street, New York 36, N. Y.

THIS COMPLEX SCALE MODEL shows a fluid "cat" cracker being engineered and constructed by The M. W. Kellogg Company. The model, built by Kellogg engineers as the plant is designed, furnishes a concurrent, color-coded, three-dimensional picture. This clarifies working drawings, results in savings of engineering and construction time as well as improved design quality.

PERSONAL BUSINESS

A BUSINESS WEEK SERVICE

If you're going to Europe this season, you'll probably buy some local products of the countries you visit, either for yourself or as gifts. Many of the traditional items are well known, of course. But the U. S. World Trade Fair (at New York's Coliseum the past two weeks) offered ideas about goods that are **new and different.**

Here's a quick review of some interesting wares, identified by manufacturer and city and quoting U. S. import prices, retail—abroad you'd usually pay 10% to 50% less:

From England—For lady gardeners, a light-weight stainless steel set—garden fork and spade, $60 (Spear & Jackson, Sheffield); **for outdoor cooks,** a three-piece barbecue set—21-in. knife, fork, and turner—in stainless steel, $10 (Kirk, Sheffield); **for your summer camp or hunting lodge,** the Zedbed, a steel bed—single or double—that folds into a small table with mattress inside, $30 (Steel, Ltd., London).

From West Germany—For campers and fishermen, rubber-and-canvas boats that fold into packs to fit in the trunk of your car; one or two seats, sails or double-bladed paddles, 17-ft. model for $350 (Klepper, Rosenheim); **for women,** the original "foreign intrigue" trench coat, in tan with leather buttons, belted waist and sleeves, $30 (Wighardt of Fulda, and others).

From Belgium—For hunters, a rugged double-barreled 10-gauge shotgun for long-range shooting, $300-$400 (Neumann, Liege); **for children,** a hand-operated 16-mm. movie projector, $20 (Cinette, Brussels); **for party hosts,** a beverage just introduced to the American market—Elixir D'Anvers, Belgium's national liqueur, compounded of fruits, herbs, and brandy, $8 a fifth (de Beukelaer, Antwerp).

From France—For the lady of the house, heavy cutlery made of carbon steel (favored by butchers), $3 to $10 for knives (Sabatier, Thiers); **for fishermen,** a heavy-duty spinning reel of new design, $35 (Centaure, Paris); **for smokers,** leather-decorated accessories such as ash trays in sports designs—baseball, football, racing—$5 to $25 (Longchamp, Paris); **for men,** large handkerchiefs in fine Egyptian cotton, vivid colors in striped designs, $10 (H. Dubois, Paris).

From Spain and Portugal—For men, black goatskin jewel boxes, $15 and up, and tan or black goatskin slippers in zippered travel case, $8 (Godoy, Ubrique); **for women,** sports skirts in gay Portuguese peasant patterns, very full cut, in cotton or all wool, $15 (Sereira, Lisbon).

From Switzerland—For novelty-lovers, a combination watch and music box for a lady's purse or a man's key chain, $40 (Reuge, Ste. Croix); **for the home workshop,** a gadget called the Hobbyfix that serves as a vise to hold objects of all sizes and shapes, $30 (Zahner, Landquart); **for girls under 12,** a sewing machine that really sews, $20 (Elna, Geneva); **for girls over 12,** an automatic knitter that makes knitting easy, $180 (Elna or Passap, Zurich).

From Italy—For the home, ultramodern furniture in knocked-down form, compactly boxed for assembly by the householder, attractive and sturdy cabinets, bookcases, and tables, medium to high in price (AMMA, Turin); **for youngsters,** small but sturdy typewriters, $18 (Alba, Milan); **for cyclists,** racing bicycles with 10-speed shift, only 22 lb., $135 (Girardengo, Alessandria); **for lovers of colorful Italian modern,** "Decalage" tables and

BUSINESS WEEK
APR. 27, 1957

benches of glazed painted wood in gay patterns, cocktail or regular height, resistant to heat, acids, alcohol, $160 to $350 (Cumino, Turin); for men, wool sweaters in handsome, bold designs and colors for sports wear, $50 (Celli, Milan); **for the home,** electric clothes brush, $15 (Lesa, Milan) and espresso coffee makers operated by electricity, 14-demitasse size, $90, less for smaller sizes (Cimbali or Faemina, Milan).

From Israel—For those who reach the Middle East, fine handmade chess sets of olive and eucalyptus woods in simple modern designs, $90 (Rina, Jerusalem); brandy and cherry liqueur, $7 a fifth (Carmel, at Reshon Le Zion).

—•—

If you're planning to rent a car on your European vacation, make reservations now—so you'll be sure to get the kind of car you want when you want it. And you'll save yourself a lot of time and trouble by making foreign license arrangements on this side of the Atlantic at the same time.

Here's what you'll need to drive abroad: an International Driver's Permit (although some countries will honor an American license if it's more than 6 months old); a customs pass for the car to cross borders; maps, copies of traffic regulations and highway markings.

The type of International Driver's Permit you'll want will depend on your itinerary. The British permit ($7.50) is unrestricted, but the American permit ($1.50) is not recognized in England, Spain, Finland, Russia, or Yugoslavia. To obtain a permit you'll need two passport-size pictures and a valid U. S. auto license. Contact your travel agent, car rental agency, or the AAA.

—•—

If you bag an unusually fine animal or bird on your next hunting expedition or haul in a prize catch on a fishing trip, you might want to have it mounted and preserved as a trophy. A good taxidermist won't just "stuff" your trophy. He'll use a lifelike clay model, then make a "mannequin" of papier mache—which is lightweight but strong. Then he'll fit the skin on the form. **Here are some suggestions** from Jonas Bros., Mt. Vernon, N. Y., one of the world's leading taxidermists:

Game animals. Either you or your guide can skin these—except for the head. Salt and dry the cape (neck and head skin) without delay. In average cool weather, get the salted head and cape to the taxidermist within a week. In cold weather (under 15F) the animal will last for about two weeks.

Birds. Skinning birds for mounting takes an experienced hand. You can let your guide do it, or have the entire bird frozen, then sent immediately to the taxidermist.

Fish. You should skin the fish or have it frozen immediately. Send it to the taxidermist the day it's caught.

Your finished bird trophy can usually be delivered in about three weeks; animals and fish often take 6 to 8 months. The trophy will last a lifetime—if it's kept clean. It will usually be mothproofed when you get it, but will have to be vacuumed once a month and either washed with soap and water or dry-cleaned every four years.

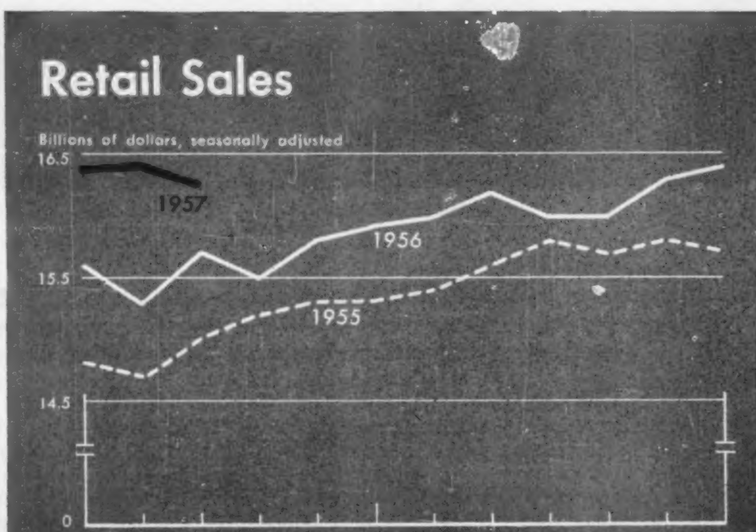
Here are some average prices for high-quality work: Birds cost between $12 and $50; fish are $18 per foot, except tuna and marlin which are priced by weight. Animal heads: deer, $50 to $60; moose, $125; rhino $350; elephant, $2,500 to $3,000. Whole animals: squirrel, $15; bobcat, $75; deer, $350; leopard, $400 to $750; lion (standard positions), $1,200.

CHARTS OF THE WEEK

Still Skidding Badly

Steel scrap prices continue to fall. Last week, the composite price, published by Iron Age, was $42.17—down 24% from the comparable year-ago week and down 35.3% from mid-December's record high. The scrap price, often a steel industry barometer, has caught the trend correctly this time.

Steel production dipped from 97.6% in February to 93.4% during March, and now has gone below 90%. March output was 3.1% below year-ago.

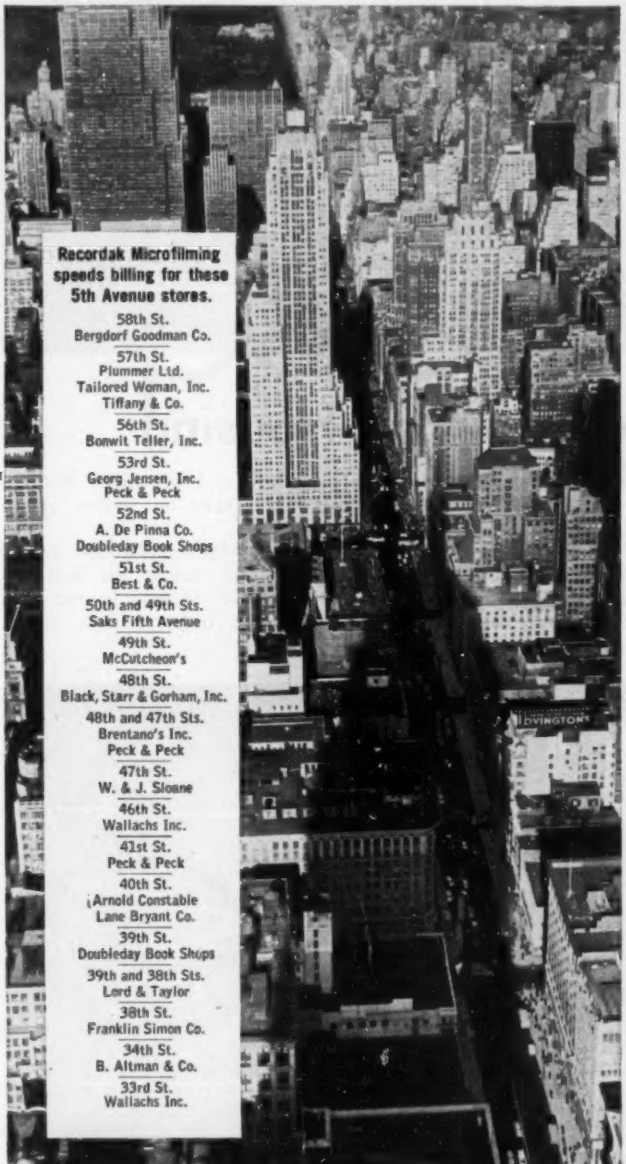


Margin Over Last Year Smaller

Sales of all retail stores in March, after seasonal adjustment, declined 1% from February. Actual dollar volume was $15.8-billion—up $1.6-billion from February. The seasonally adjusted March total was almost 4% above March, 1956, but this was the smallest year-to-year gain since November. In

Short cuts with Recordak Microfilming

Latest report on how this low-cost photographic process is simplifying routines for more than 100 different types of business . . . thousands of concerns



HOW FAMOUS 5th AVENUE STORES CUT BILLING COSTS, INCREASE GOOD WILL

New York, N. Y.

Take a stroll down 5th Avenue. Drop into any of the renowned stores and shops. Chances are they're using Recordak Microfilming to bill charge-account customers.

Reason for this—

Microfilming the customers' saleschecks—and sending them out with the bills—eliminates a description of each purchase and a listing of each price. Only the sales check totals and credits go on the bill. This cuts posting operations as much as 85%. Complete film record of all accounts can be filed at fingertips—ready for immediate review in Recordak Film Reader.

Customers, on the other hand, find it much easier to recall charges with the original sales checks in hand. Questions about bills are reduced by as much as 80%.

It's much the same story off 5th Avenue—a few doors away you'll find Abercrombie & Fitch, Brooks Bros., Stern Bros., Liberty Music Shops . . . and so it goes. Not only in New York but Anywhere, U.S.A. For it pays retailers with as few as 2500 charge accounts to use Recordak Photographic Billing.

Free booklet "Short Cuts that Save Millions," shows how you can save with Recordak Microfilming regardless of your type of business.

"Recordak" is a trademark

RECORDAK

(Subsidiary of Eastman Kodak Company)

originator of modern microfilming—and its application to business routines

New Recordak Reliant Microfilmer gives you up to 80 pictures for 1¢

MAIL COUPON TODAY

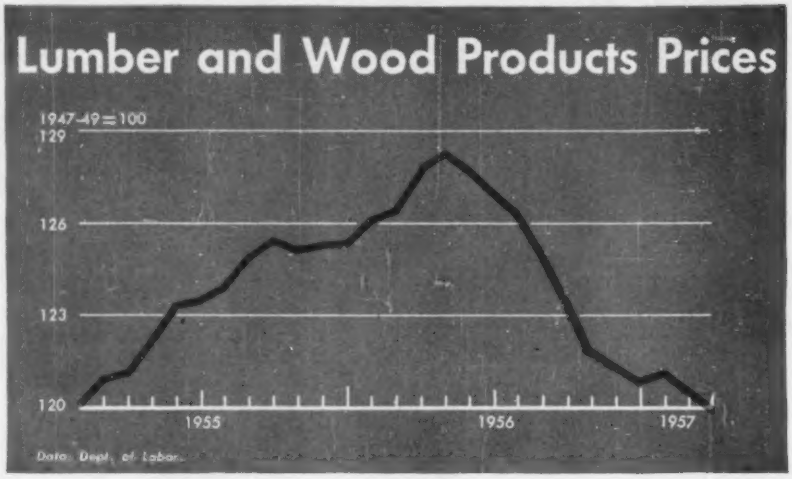
RECORDAK CORPORATION
415 Madison Avenue, New York 17, N. Y.

Gentlemen: Please send free copy of "Short Cuts that Save Millions." A-4

Name________
Position________
Company________
Street________
City________ State________

February, the year-to-year spread was 7%.

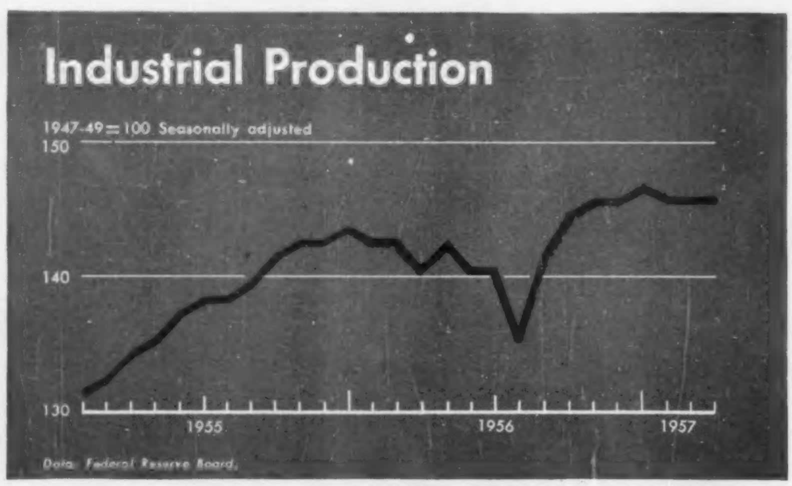
Store sales of nondurable goods rose 5% in March over a year ago; total for durable goods was up only 2%. The February comparison had shown gains of 7% and 8% in durables and nondurables respectively.



Slowed Down by Housing

In the past year, lumber and wood products prices have been bucking the trend of most other prices, falling 6.5% since April, 1956, the all-time high. The main reason is the continuing slide of housing starts. Production of lumber and products has been curtailed in an effort to hold prices, but this move only recently has shown signs of being effective.

Lumber production for January-February was 9% below the first two months of 1956. Shipments were down 13%, and new orders 14.7%.



Riding Along on a Plateau

Output of the nation's factories and mines in March was unchanged from February, at 146% of the 1947-49 average.

The seasonally adjusted index has remained on a plateau for six months, with the single exception of last December, when it rose to 147. Last March, it was still 3½% above March, 1956.

Activity in March was increased further in the aircraft, railroad equipment, shipbuilding, and farm machinery industries. Auto production declined from February, but total automotive output, including parts, was at the same level as a year ago.

Making man the master of paperwork

As the business pace accelerates in this year of 1957, paperwork costs are multiplying even faster. The keen competition for clerical workers doesn't help the situation in any way. For some businesses, Underwood automation of paperwork has been the actual means of survival. For many others, the efficiency of Underwood systems has meant an improved profit picture through lower clerical costs, closer management control and improved service to customers. Let Underwood help put you on top of paperwork problems. Call your local Underwood showroom (see Yellow Pages), or write to Underwood Corporation, One Park Avenue, New York 16, N. Y.

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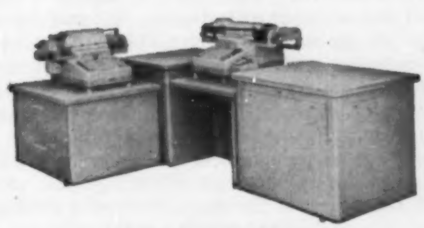
master-control systems

Post-Master, Sundstrand and Elliott-Fisher accounting machines



Elecom 50 electronic computer systems

Dataflo® processing systems

- Business is turning up every stone in a frantic hunt for engineers and technicians.
- Top scientists are desperately short.
- The Armed Forces cry for technical men.
- Industry uses five to 10 times as many college men as a decade ago—and still is short.
- The schools need nearly 1-million more teachers by 1965.
- This growing hunger for brains is no temporary thing.
- It results from basic changes in the economy and is producing a . . .

Top Problem for U.S.—A General

However hard the shortage of any particular variety of expert talent may be hitting you, it's likely to give you something of a shock when you set down all the places that feel a similar scarcity. That brings a sharp realization of how acute and how widespread today's shortage of brainpower actually is.

Not every businessman runs into quite the situation depicted above. But scores of leading U.S. companies find their need for highly educated personnel multiplying much faster than the supply—and most of them have told BUSINESS WEEK they expect matters to get worse rather than better.

The general shortage of brainpower, in fact, is taking its place alongside death and taxes as one of the basic conditions that business management is going to have to deal with for a good many years to come. And farsighted businessmen are beginning to look ahead to discover what they can do about it.

• **Brains, Not Robots**—The shortage is going to be with us for a long time because it's closely tied in with the advanced stage of development reached by U.S. industrial society.

What's behind the brainpower shortage is something that's scarcely realized yet, something that tends to be obscured by all the talk of mechanical brains, computers, automation. The fact is that as our industrial society grows more complex, depends more and more on machines, it's actually putting a greater and greater premium on human brainpower and on the creative intelligence that's lacking in the machines—and it's offering far greater scope and freedom than ever before for each individual brain to stretch its thinking power to the limit.

Recent emphasis on automation and on the feats performed by computers has revived in some quarters the old fears that industry, science, and technology are combining to stifle human values, or even to make people obsolete and spawn a race of robots.

Yet, as so frequently in the past—when the industrial system was charged with herding people into wretched factory towns or demoralizing them with mass unemployment—the anxieties aroused by the system appear to conceal its accomplishments and potentialities.

• **Twin Effects**—Technological development, as it grows more complex, affects a people in two fundamental ways:

• It puts a high premium on educated human intelligence, creates enormous demands for people capable of using their intelligence. Far from im-

Shortage of Brainpower

posing intellectual conformity, it calls urgently for men who can think for themselves.

• By increasing production faster than population growth, it solves the problem of satisfying man's physical needs. As a result, it's bringing greater potentialities for improvement of human talents—for their employment both at work and after work—and for their extension to a broader share of the entire population than ever before. Modern industrial society is the first that promises to extend these opportunities to everybody.

This double effect of the modern industrial system—which puts human brainpower on the highest pedestal—isn't some vague future possibility, some wishful thinker's daydream. It has already struck the American society with a force that few comprehend; and it cannot be checked. It's rapidly multiplying the urgent need for highly educated, creatively intelligent men—and multiplying it so fast the educational processes can't catch up.

Even if Americans were content to rest on their present attainments, it might be national suicide—in a period of competitive coexistence and cold war—to stay at that level. The real foundation for the nation's strength is human knowledge. The need for more people with knowledge has already become evident in every area of American life.

I. Where the Need Is

There's hardly anyone today who hasn't bumped his head against some specific aspect of this spreading need for educated talent. But these aspects are so varied that few have realized the impact in its totality. Each area feels its own critical need:

• Business and industry—for scientists, engineers, managers, highly trained technicians.

• Government—for these, and for people skilled in social sciences, international relations, languages, public administration.

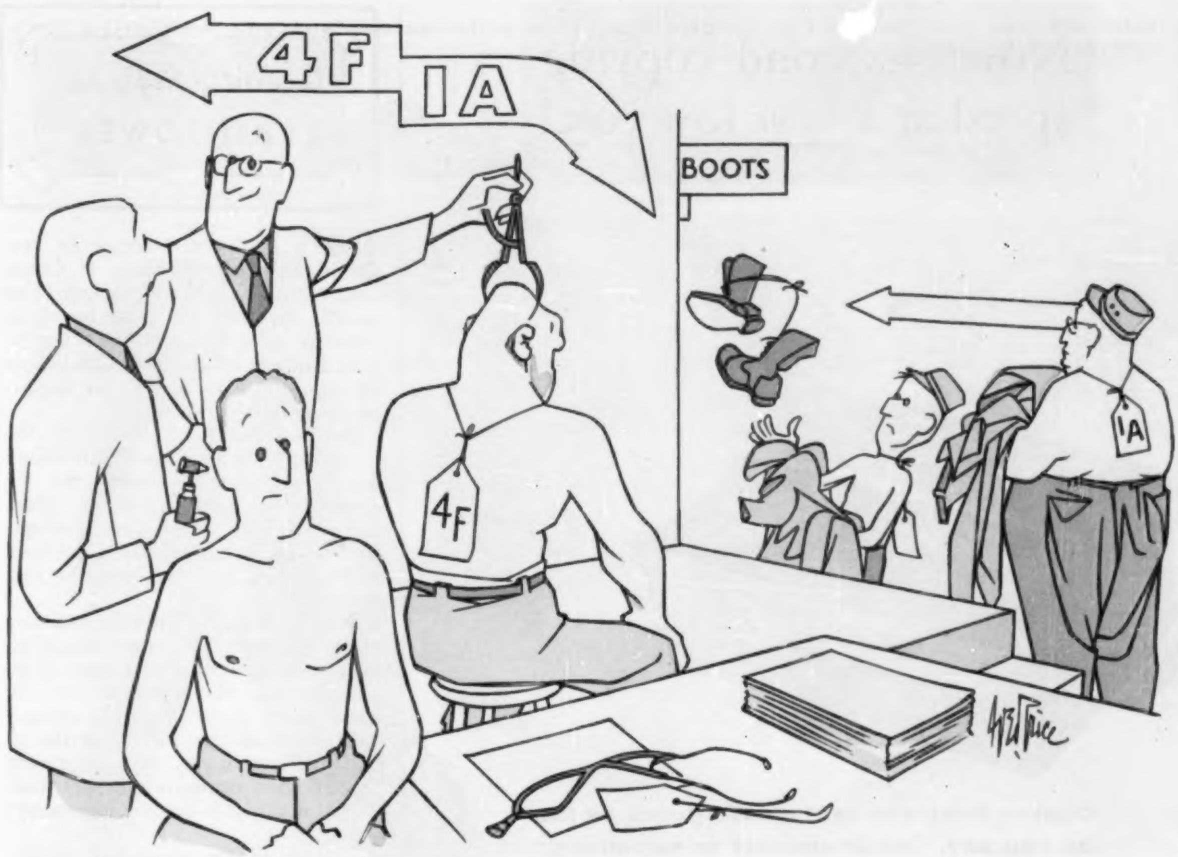
• The Armed Forces—for highly trained officers, enlisted men, and civilians able to develop and operate a more and more complex war machine.

• Public and secondary schools—for competent teachers.

• Colleges and universities—not only for gifted teachers, but for really creative thinkers and researchers.

• And the entire society—for outstanding organizers and cultural leaders—those who set the goals that stir others to their best efforts.

One symptom of the over-all need is the cacophony of charges that skilled engineers are wasting their time on



The Armed Forces need men suited for a more and more complex war machine.

technicians' jobs, that highly trained people are being "drained away" to other jobs—teachers into industry, engineers into management, fundamental scientists into applied research, and so on—or that companies are "hoarding" scientists and engineers and managers away from each other.

• **No Passing Phase**—Most people assume all this is simply a phenomenon born of the economic boom, and wonder if it will evaporate if the economy slips down to a slower pace. That could of course happen—as a short-run development. But the growing need for educated talent is founded on a more durable base than the short-run business cycle.

It's true that during and just after the war the shortage was indeed regarded by many experts as a transitory phase. Immediately after the war, there was a revival of the depression-born notion that we were training too many engineers, too many mathematicians and other "intellectuals." There were fears that this might set the stage for a nasty social explosion by these educated but unusable groups—as in the Fascist and Communist movements in Europe before World War II.

Such fears proved to be nonsensical. The demand for educated people, far from contracting as the extreme wartime needs tapered off, actually continued to grow—through prosperity and three moderate postwar recessions. There's every evidence that it will go on growing in the years ahead.

How Business Sees It

Nobody knows better than U. S. industries how steeply the need for educated people has been rising. This is abundantly clear from the responses made by over 100 leading U. S. companies to a question put by BUSINESS WEEK. Company after company confirmed the trend.

The companies responded to this question: "How many more trained people—say, those with a college education or its equivalent—do you need today to run your business successfully than you did 10 or 20 years ago?"

Here are some representative company answers:

• **Ford Motor Co.**: "As far as persons actually holding college degrees, we now employ approximately five times as many as we did 10 years ago."

• **Carborundum Co.**: ". . . 100% greater as compared with 10 years ago. A college education is a normal requirement for practically all new employees in management, sales, staff, research, and engineering jobs."

• **Chas. Pfizer & Co.**: "During the past 10 years our staff of trained people has increased by over 500%."

• **Thiokol Chemical Corp.**: "We need 20 times as many technically trained people to continue in business today as we did 10 years ago."

• **International Nickel Co.**: "Three to four times as many."

• **Air Reduction Co.**: "Five to six times as many."

• **Armstrong Cork Co.**: "Since Armstrong has been a heavy and continuous employer of college graduates for the past 37 years, the increase in our need for trained personnel in the last 10 or 20 years would perhaps be less than for a great many companies. But we need more today. The best measure is the size of our training classes. Our 1956 class of college graduate trainees was two and one-half times the size of the class 10 years ago, in 1947, and four times the size of the class 20 years ago. . . ."

Many companies couldn't give a specific answer to the question because they have grown so much or changed

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so much in the past decade or two. Lucius D. Clay, chairman of Continental Can Co., said, for example: "Our growth has been too great for us to make an accurate estimate of our requirements today for men with college educations as compared to our requirements of 10 or 20 years ago."

But he went on to concur in the general view, in these words: "In today's highly competitive economy we are constantly raising our standards. Thus, today we need many more college-trained men in relationship to our total business than has ever been the case in the past."

• **No End in Sight**—Virtually every one of the responding companies expects its hunger for well-educated people to go on increasing. None of them sees any letup coming in the headaches management has been experiencing in the recent past in trying to get hold of such people. Most companies, in fact, look for the situation to become increasingly worse.

Typical of the somewhat gloomy business view of what's ahead is this rather restrained comment from Anthony G. De Lorenzo, a General Motors vice-president: "In the past few years it has become increasingly difficult to meet our needs, particularly in the engineering and scientific fields. I do not know of any development that holds out promise for an early easing of the situation."

• **Varying Hungers**—The specific spots in which the shortages of educated people are most acute vary from company to company—depending on the company's main activity and where it's making its biggest efforts right now.

Pfizer, for example, said it's especially hungry for pharmaceutical chemists, pharmacologists, and research chemists with Ph.D.s—and for sales people with technical training in chemical and agricultural sales. At Bendix Aviation Corp. (a company that lives on engineering), the major shortage is engineers.

Others have different needs:

• The Burroughs Corp. has been pushing out new products fast—so its biggest problem is sales, its biggest shortage is in sales personnel.

• AC Spark Plug Div. of General Motors is doing a lot of original research on electronics. Its sharpest need is idea men.

• Wyandotte Chemicals Corp. is still expanding its management; its

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greatest need is for engineer-managers.

• Great Lakes Steel Corp.'s needs run in the same direction.

Continental Can, on the other hand, doesn't limit itself; it says it's always looking for good people right across the board—as plant and sales managers, qualified engineers and scientists, food technicians, economists, industrial engineers, industrial relations experts.

But all this is still only a beginning on the list of what's needed. Banks and other financial institutions are short of lawyers, most big businesses are short of accountants to take on complex tax problems, mathematicians to handle electronic computers, business administration graduates for management training programs.

• **Supporting Cast**—If you go below the college-educated level, the scarcity of trained supporting technicians is just as acute—some would say even more so. Indeed, that's part of the reason for the engineering shortage: Engineers have to do technicians' work.

In the U.S.—Howard A. Meyerhoff, executive director of the Scientific Manpower Commission, points out—there's just one supporting technician for every three engineers. This reverses the situation in Europe, where there are three supporting technicians for each engineer.

Massive Upgrading

What's happening, in reality, is a massive upgrading of the skills required of the entire U.S. labor force. That focuses the manpower problem, to put it in broad terms, on the whole group in the population that's capable of exercising human intelligence, judgment, imagination—or even personal charm.

• **Chain Reaction**—The reason becomes clear when you look at the way the whole industrial system operates in its complex current version. You start with the people who create new ideas, the scientists—and they're desperately short. Then you need people to engineer these ideas into things or processes—and they are also in short supply.

The next step calls for men who can assemble, organize, and direct the people and the money and the equipment for getting the engineered ideas into production. And managers—especially those able to see how all parts of the process can best be put together—are mighty scarce.

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Then you need workers. The kind that can design or make or repair the machines are in hot demand; but the ones that just work along with the machines, or are doing work that machines can take over, are not. When the goods are produced, they have to be marketed—and salesmen, sales girls, advertising men are in short supply, too.

Finally, in the background of the whole process, are the people who have to train all these others—and those who do the research that helps make the work at each step more efficient. These, too, are scarce.

• **Men, Not Machines**—The reason for all this is that the flow of new ideas has been fast and furious. They are ideas that do make obsolete the human types who, in their functions, resemble machines. But they put tremendous demands upon those who are capable of thinking and acting with the intelligence that is the special mark of human beings.

Glimpse of the Future

This view of what's going on is supported by some forecasts by the U. S. Labor Dept. of changes in the relative standing of brain and brawn in the work of the future. The Labor Dept. has made careful projections of employment trends of major occupational groups for a decade ahead.

For the period 1955-1965, the department finds that the fastest employment growth will be among professionals. In 1955, this group numbered 5.7-million. By 1965 it should add another 2.1-million—a 37% increase. Says Asst. Secy. of Labor Rocco C. Siciliano: "There is real need for expansion in many of the important groups here—the 1-million workers in engineering and science, the 1½-million in teaching, and the 1-million in medical services—doctors, dentists, nurses, and so on."

• **From Blue to White Collars**—All the white-collar groups—managers and clerical and sales people as well as professionals—will grow rapidly. This year, Siciliano points out, the white-collar group as a whole reached an historic turning point—it became the biggest single segment of the labor force, outnumbering the blue-collar workers for the first time. The white-collar wearers now number about 25-million. By 1965 they will grow by another 5-million.

But laborers will not add to their

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ranks in this coming decade; so as a percentage of the expanding labor force they will diminish. Farmers and farm workers (now counted at about 6-million) will actually decline in numbers, losing about 1-million of their present total, the Labor Dept. figures.

• **Clear Trend**—Of course these Labor Dept. estimates, like all projections of future growth, are rough calculations—based on the assumption of a gross national product in 1965 of $560-billion (in 1955 dollars) and a labor force of 74-million.

But whatever the errors in detail—and there are bound to be many—the central point stands out undeniably: Industrial evolution is creating a tremendous demand for far better trained, and more widely dispersed, human talents.

Why Machines Need Brains

How explain this striking trend? There can't be any simple explanation of such a complex and many-sided development—but you can track down some of the main elements that contribute to it:

More complicated machinery does two things. On one side, it takes the place of slow and inefficient human functions and abilities, such as pulling, lifting, walking, remembering, measuring, seeing and hearing, spreading information. **On the other, it stimulates enormous demands for other human faculties involving thought and imagination**—valuing, judging, sensing, spotting relations between the apparently dissimilar, generalizing—and creating.

Today's complex machines perform the first set of functions with an astronomical increase in efficiency as compared with humans. But even the most fantastically complex mechanical monsters can exercise or simulate the second group of human faculties at only a relatively primitive level. Just to keep the two areas in balance greatly magnifies the need for the human exercise of these talents.

The speeding up of technological developments breeds a mounting need for even faster scientific and technological growth. As everyone consumes more energy, more natural resources, the easily available supply provided by nature dwindles more sharply. So we call on science and technology to supply us with the materials and energy required

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by a rising population bent on higher standards of life.

Technological and scientific progress force human knowledge and skills into greater specialization in every field. The biologist splits into the biochemist, the biophysicist, the geneticist, the embryologist, and so on—the general practitioner into the cardiologist, the gynecologist, the obstetrician, the pediatrician, the internist. And so it goes in every line.

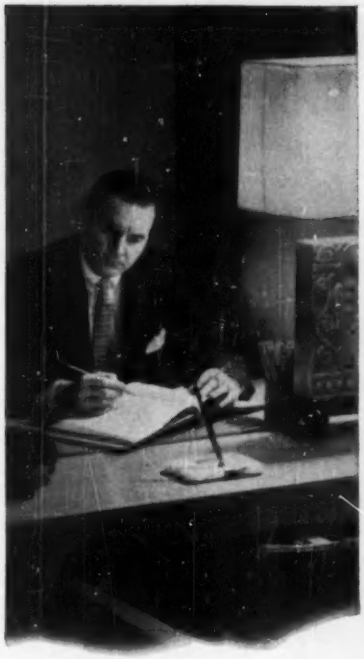
This increasing specialization, in turn, produces a counter-need—for the integrating generalist, who can master a broad area taking in many specialties, so as to combine their achievements for wider application. The specialties, indeed, become so diverse, and so ingrown in their individual pastures, that this integrating generalist may turn out to be the rarest and most valuable talent of all.

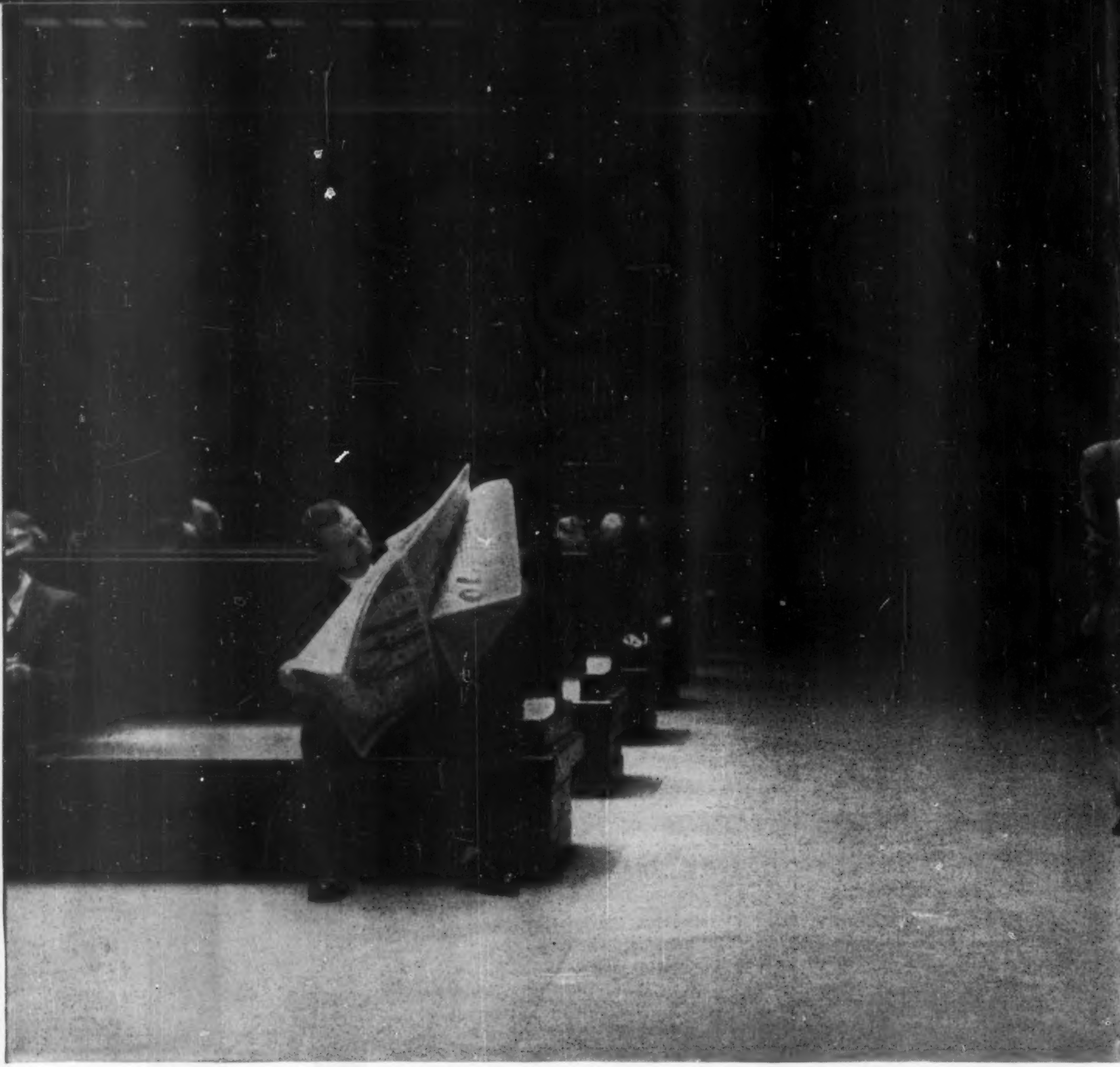
What's likely to be more and more needed—as specialties multiply faster than the supply of outstanding specialists—is the development of men who are highly skilled not so much in any single specialty as in scientific processes as such. Then these men can turn quickly from one research field to another, trusting the more routine gathering and storing of information to others —or to machines.

International conflict adds to the demand for educated talent. In an industrial age, military prowess largely depends on technological mastery. It's beyond doubt that many recent advances in atomic energy, electronics, aeronautical engineering, chemistry and biochemistry, and so on, were in part byproducts of international struggle—first, in World War II, against the Nazis and Japanese; later, against the Communists.

• **Interrelated**—But it would be oversimplifying to attribute all recent technological advance to international conflict. Particular branches of science have a sort of life and growth of their own. Basic new discoveries often seem to sprout—and in many widely scattered laboratories—when the scientific soil is prepared for them. And many other factors—economic, social, political, demographic—bear upon the rate of technological progress.

All these factors act upon each other. Technological development sparks new investment, stimulates rising national income. Rising income helps stimulate population growth. Population growth





requires more public and private construction, increased production, and—to maintain living standards—greater productivity. This rounds out the circle by stimulating further technological progress.

The cycle doesn't depend on war or international conflict—certainly not after it has once got rolling.

Unpredictable Force

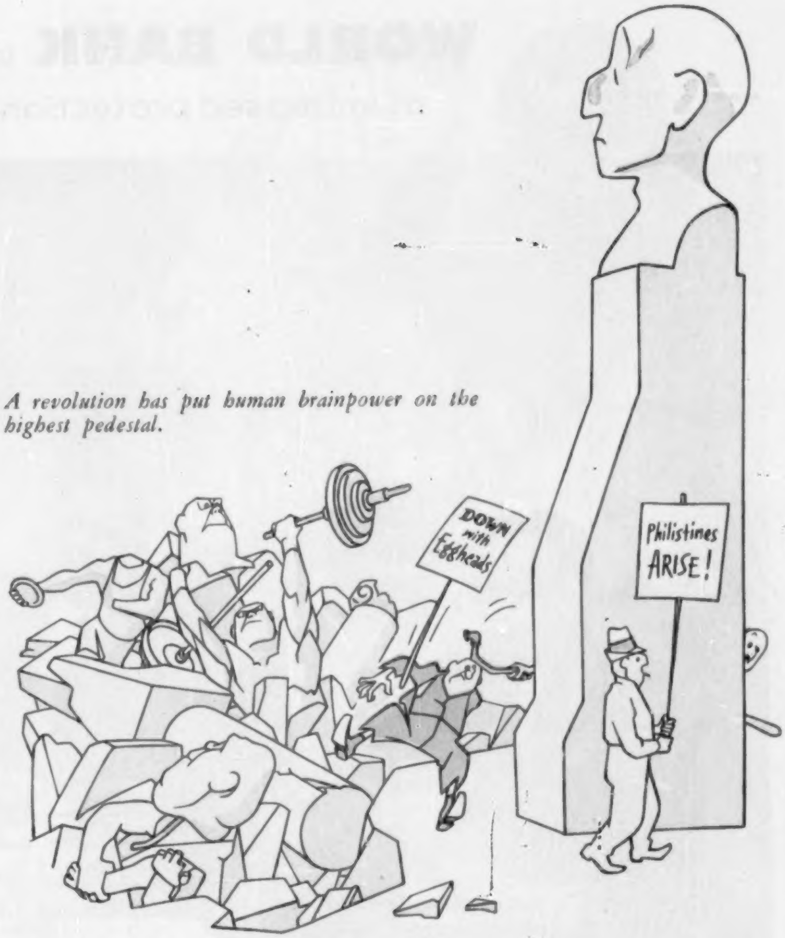
No one can describe precisely all the elements making up this new force that has struck U.S. industrial society with such powerful impact, opening up such an insatiable demand for special skills, managerial abilities, creative gifts. That does not make the force any less real.

Nor can anyone say for sure just how long this cry for educated talent will be heard, nor how loud it may become. That will depend on the quality and number of talents that the country can marshal to meet the present demand and keep step with its growth.

Because future needs will depend on still unborn discoveries, no one can really foresee just what kinds of educated people will be most urgently required in the years to come, or from what particular lines of activity the loudest calls will be heard. All we can be sure of is that, as time goes on, we will be scouting around for more and more such people.

And the job of getting them in large enough numbers and sufficiently high quality to meet the swelling demand—especially in the period just ahead—is going to be rough.

A revolution has put human brainpower on the highest pedestal.



II. Supplying the Brains

For the immediate future, the outlook isn't too hopeful.

During the 1920s, the U.S. birth rate averaged 25 per 1,000 of the population. With the onset of the Depression, it began sliding downward. For the whole decade of the 1930s, it averaged only 19 per 1,000. It rose a bit during the war—and really climbed when peace came. Since World War II, the birth rate has averaged nearly 25 per 1,000.

The combined effect of this dip and rise in the birth rate puts a squeeze on the supply of trained people, and will greatly hamper efforts to meet the demand in the coming decade.

• **Hollow Generation**—On one side of the picture is the "hollow generation" of the Depression years, now coming of age. Its comparatively small numbers have been limiting the size of recent college classes, and will continue to hold down the college population for a few years more.

The same thing is true of the labor force. Total U.S. population is growing rapidly, because of current higher birth rates and lower death rates. But the baby drought of the 1930s is checking the expansion of the labor force in the most productive age group—those from 25 to 44.

The Labor Dept.'s projections for the 1955-65 period hold out no hope for any near-term change in this situation. The department sees the number of men and women in the labor force in the 25-to-44 group staying about the same, while total population gains 27-million in the decade, reaching 193-million by 1965. In 1960, in fact, there are likely to be a half-million fewer men between 25 and 34 in the labor force than there were in 1955.

These are the age levels, roughly speaking, where companies will be looking for bright young talents for future development.

• **Oncoming Horde**—On the opposite side of the picture are the bumper baby crops of the postwar years, which—as everyone knows—are now beginning to put a severe strain on the U.S. educational system. In the period just ahead, this strain will become even more intense.

You only have to look at the Labor Dept. estimates of the increase in school enrollments in the 1955-65 decade:

• In elementary schools, 8-million more children—a 30% rise.

• In high schools, 12-million more—a 60% jump.

• In colleges, 2-million more students—a climb of 75%.

Pressures on the Schools

The pressure of this gigantic oncoming tide of youth on the educational system is going to do two things:

• It will put terrific demands on the specialized talent that must be "ploughed back" into educating the new generation—and hence will not be available for work in industry, government, or research.

• Unless ways can be found quickly to prevent it, this pressure will bring a deterioration in U.S. educational standards—thus aggravating still further the shortage of high-quality graduates of our schools, colleges, and universities. The danger is already being compounded by the inability of schools and colleges to compete with industry for new college graduates.

• **Teacher Gap**—The Ford Founda-

Executive after executive reeled off prescriptions for the care and feeding of intellectuals.

tion's Fund for the Advancement of Education has made a calculation of the number of teachers that will be needed. It figures that in order to maintain present pupil-teacher ratios and to provide for replacements and expansion, U.S. schools (below the college level) will have to find 16 new teachers between now and 1965 for every 10 now teaching. That's equivalent to replacing all the teachers we now have and finding 60% more.

For colleges, it will be even tougher. To maintain the present average ratio of 13 students to a teacher, U.S. colleges would have to scrape up by 1970 between 16 and 25 new professors for every 10 they now have.

Look at it the other way round, and it's even more startling. It means that over the next 10 years we would have to take 1.9-million college graduates—half of the 3.7-million total that's expected to come out of the colleges—just to meet the need for new teachers. As things are, only about one-fifth of all college graduates go into school or college teaching.

• **Threat**—The effect on educational standards could be serious. Today two-fifths of U.S. college teachers hold Ph.D. degrees—which are certainly a measure of the amount of training, if not of qualitative merit. But by 1970, the Ford Foundation estimates, only one-fifth of the college teachers may be Ph.D.s.

If educational methods remain about what they are, and more poorly prepared teachers must face much larger classes, the decay of standards could be cumulative.

In high schools the effect on standards is already even more ominous—and many observers regard improvement in the high schools as the really crucial point, the key to an increase in the number of those able to go on to difficult scientific work in college.

In the five years from 1950 to 1955 there was a sharp drop in the output of new high school teachers in important subjects:

• The output of teachers of mathematics declined by 51%.

• In teachers of industrial arts, the drop was 54%.

• In science teachers, the decline was 57%.

As the shortage of qualified teachers mounts, more emergency teachers are hired, and more children get part-time schooling on double sessions.

What Kind of Training?

Nearly everybody is willing to concede that the U.S. faces one of its toughest and most fundamental problems in this question of how to handle the oncoming flood of new elementary school, high school, and college students—and how to provide them with the upgraded education that's demanded by the growing complexity of science,

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technology, and the whole economy.

But nobody yet has the answers.

In fact, there's sharp disagreement and hot argument, among educators and laymen alike, over how to go about the job.

• Some—among them, the heads of the Fund for the Advancement of Education—would seek ways of rapidly increasing the productivity and effectiveness of each teacher, by some method such as the use of educational TV. Others fear that these "mass media" techniques would only debase standards still further.

• Some call for establishing a larger and larger number of colleges and universities to keep up with the number of students seeking entrance—and for spreading the best teachers, and students, too, more evenly throughout the nation. Others contend that the students who come to, and cling to, the best institutions are doing the smartest thing. Whatever the aggregate needs of society, they say, this makes for quality, and quality is the most important thing of all.

• **Advocate**—This is a hotly debated point. Lee DuBridge, president of California Institute of Technology, presents one argument for concentrating the best students in the best schools.

"I understand," he says, "that over half of the top men students of the country who won National Merit Scholarships—300 or so boys of really top ability—chose to go to about a half-dozen universities and institutes of technology, all of which are generally recognized as being the most difficult in the country to get into. Those smart boys were smart enough to know that if they were smart enough to win a scholarship, they ought to go where the smartest students are to be found."

Some complain that this is unfair to smaller and less famous colleges, DuBridge says, adding: "But I say it is unfair to the other 50% of those smart boys if they go to institutions where they will never have the competition required to develop their talents." He might even suggest, he went on, that the Merit Scholarship Board should not allow any winners in the top 1% to use their scholarships except at a "select few of the institutions of the country" with proved capacity to give full challenge to top talent.

• **Other Proposals**—There are other widely debated suggestions for strength-

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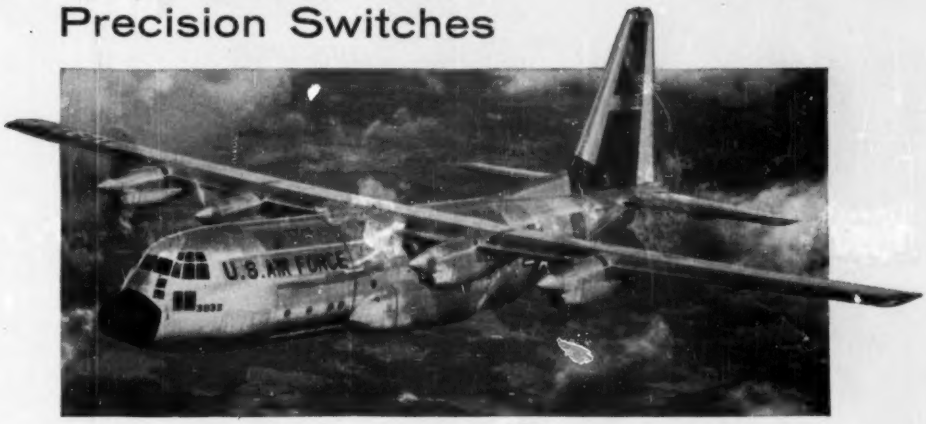

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ening education to meet the new challenge:

• Some see the only solution in heavy federal outlays to improve schools, raise teachers' salaries, provide more scholarships for the able (at present, the Fund for the Advancement of Education found, more than one-half of the ablest youth doesn't get to college). This brings loud cries of opposition from others, who feel that large-scale federal aid is bound to produce corrosive effects on the range and variety of education, and might in fact limit its freedom.

• Some—Rear Adm. H. G. Rickover is one—argue for special schools for especially bright youngsters. Others condemn this as an undemocratic and unnecessarily narrow way of trying to develop the educated talent we need.

• **Lag in Action**—The arguments wax hotter, but as yet they have led to little action, despite endless committee and commission inquiries. This lag in action is strong evidence that the American people haven't yet taken the problem quite seriously.

Some interested observers, both educators and businessmen, point out that this lag isn't unusual—it commonly takes a crisis to rouse the American people to strong action. But they are afraid that in this case such a crash-program approach may not be enough.

It takes a long time to build a school and college and graduate school system that can turn out a large supply of highly competent specialists. And that's not all, as these observers see it. Any real solution to the brainpower shortage, they say, will require a certain shift in social values—one that will attach the highest social prestige, not to speak of higher financial rewards, to the trained specialists and the educators who help to develop them.

Brains on a Pedestal

Any swing in values that would put brainpower on society's highest pedestal would be a long-range proposition, of course. But signs abound—many turned up in the responses to BUSINESS WEEK's survey of leading companies—that some cultural shift toward greater respect for educated talent may be at hand.

"Important changes bearing on the position of the scientist and engineer," says H. Gershinowitz, president of Shell Development Co., "are already taking

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place. Science is far more than just the source of the technological advances that raise the standard of living and provide our national security. Science has become a vital part of our culture and society."

And science has a new importance in business, he points out: "A general appreciation of science and technology, and the real understanding of some area of their application, is now essential to a large and growing portion of top positions in business, industry, and government."

Gershinowitz insists that "as the general public is brought to a better understanding of these facts, the status of the engineer both socially and economically is bound to improve. . . ."

• **Humanities, Too**—This halo that's beginning to glimmer over the natural scientist and engineer is already bright enough to reflect some glory on his colleagues in other fields, including the humanities. The Bell Telephone Co. of Pennsylvania, for example, has been sending many of its managers for advanced training, not to "management" courses or some closely related study, but to a 10-month Institute of Humanistic Studies at the University of Pennsylvania.

Another sign: An influential leader of business thought, Clarence B. Randall, former chairman of Inland Steel, gave a series of lectures at Harvard recently on the businessman and the liberal arts. He called on businessmen to widen their horizons by "the exciting processes of liberal education," which would help them to recognize and discharge their obligations to the community.

• **Laggard Eggheads**—One group seems not to have caught on to this growing appreciation for intellectual attainments—the intellectuals themselves. John W. Gardner, president of the Carnegie Corp. and a leading stimulator of the "great national talent hunt," underscores the point. He notes that U.S. intellectuals—like some earlier minority groups in U.S. society—seem not to have noticed that they have virtually left behind them their "inferior social status."

True, the old suspicion and scorn of the "long-hair," the "double-dome," the "egghead" may be a long time dying in some quarters. But Americans have repeatedly demonstrated that they are nothing if not pragmatic; and any traces

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of anti-intellectual prejudice holding over from hard-bitten frontier days are likely to give way to the force of necessity.

III. Free to Be Human

It's a necessity that's going to face everyone who's now responsible for any sort of enterprise just as long as he holds that responsibility. The shortage of brainpower will put a high premium on any kind of mechanism that anyone can devise to alleviate it—but it's not a condition that's going to be eliminated.

That becomes quite evident when you look at what's involved. The trouble isn't in discovering the prescription for a remedy—just about everybody who has thought about it agrees what the prescription is. What it calls for is to pour more funds into education, raise the financial and social rewards for the educated people we need, break down barriers to the supply of educated talent—economic barriers that may prevent the farm boy with brains, or others low in the economic scale, from having an equal chance; racial barriers that keep society from making full use of Negro citizens; barriers of prejudice that keep women from advancing.

Yet when you take a deeper look at what goes into this prescription, it's obvious that there will be real difficulties in translating these generalities into daily action—and that these difficulties are going to frustrate us for a long time.

• **Birth Pains of a New Era**—Put in those terms, it all sounds rather grim. But there's another way of looking at it. It doesn't take too much of a mental shake to realize the harassing scarcity of people willing and able to use their heads is only one side of a coin.

Looked at from the other side, the coin shows, for the first time in history, the picture of a society that is forced by its own necessities to treat all of its members as in the fullest sense thinking, imagining human beings. In every past society, sheer physical need has required that a large proportion of the people be reserved for use as beasts of burden, as machines, as attachments for machines, you might say. Even now, much of the world is still struggling to attain those human freedoms already achieved in highly industralized countries.

Yet today we are well into an era that

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invites everyone, literally everyone, to share the variety and freedom and challenge which in the past a small elite group, a minority of intellectuals and professionals, have always claimed as their own.

• **Spur**—This is today's version of the chronic labor shortage, of the frontier economy, which has been the peculiar characteristic of American society since its beginning—and which, some would argue, is the major reason for its unique accomplishments.

It should be one of the more exciting things in the coming decades to see how the mass of the U.S. population responds to this challenge. Without much preparation, and at a time when the educational machinery is in a shaky state, just about every American is being invited, urged, goaded to develop and use every bit of intelligence, skill, and imagination of which he is capable.

As other industrialized countries develop a similarly complex industrial organization—Britain, say, and possibly Russia (BW—Nov.19'55,p41)—similar shortages of educated talent and a similar priority for brains tend to show up there, too.

• **Changes on the Way**—In the U.S. there are signs that the results of the summons to intellectual battle may be surprising. Already we are a nation of high school graduates—a possibility that few hardheaded men of the 1890s would have been prepared to contemplate.

Sharp changes are beginning to occur in the hierarchy and organization of industry. A recurring theme as BUSINESS WEEK reporters talked to businessmen about these problems was a recognition of the need for business to show more respect for the brains of its employees.

Executive after executive reeled off the same prescriptions for the care and feeding of thinkers that have long been familiar in the brainworkers' old haunts—education and the professions:

• "Provide proper recognition for the professional individual from both economic and non-economic points of view—treat him as a truly professional person with the privileges that such persons have learned to expect. . . ."

• ". . . Insure that these men are not draining off their time and energy in doing a multitude of routine chores of the kind that develop around their assignment."

• ". . . Avoid too tight organization lines and leave people with such

Urgently Required
BRAINPOWER
Story starts on P. 176

potential considerable leeway for the exercise of individual initiative."

• "Encourage their participation in professional societies and attendance at scientific and technical meetings... see that individuals get credit and recognition for findings. . . ."

• "Make industry more and more of an educational institution, equipped to train and upgrade people."

• ". . . Recognize that creativeness is the result of individuality, and that it is essential to understand this individuality rather than to attempt to fit the creative individual into a conformed job pattern."

Over and over, executives stressed the importance of providing educated people with freedom to think and to question, to take responsibility and form independent judgments–and of providing individual recognition and prestige.

Rarer, but more significant, is the view expressed by one Carborundum Co. executive–that these prescriptions are not something peculiar to the professional level of a business, that on the contrary "all phases of the business call for creative men; creativity and initiative are not something to be bottled up among a little group of elite intellectuals."

An MIT dean put the same thought this way: "One of industry's major problems is providing satisfaction to people in it. Since man is essentially creative, business must be organized so that more and more men throughout an organization can derive satisfaction from creativity."

If these men fully mean what they say, industrial and technological development–and the shortage of human talent it creates–may well extend, rather than shrink, the area of human freedom.

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The Shortage That Production Creates

In this issue, BUSINESS WEEK presents two reports that have some provocative implications. One is the 10th annual survey of plans for capital spending (page 41). The second is a special report (page 176) under the headline: Top Problem for the U. S. —A General Shortage of Brainpower.

The report on McGraw-Hill's survey of business plans has some immediately cheering news: Investment is holding high at $41-billion this year, promises to stay high through 1960.

Research Spending . . .

It also has some striking information on industry's research program. Companies are spending more than $7.3-billion for research this year—20% more than in 1956. This accelerating effort promises to bring with it the greatest outpouring of new products and new processes that the U. S. has ever seen.

But it also brings with it problems—notably the crying need for scientists and technicians. This year alone companies hope to increase their scientific manpower by 7%.

This is, of course, an old problem. The shortage of engineers—along with executives, teachers, nurses, technicians, and other groups—has been with us for years.

. . . And Brainpower

But this week's special report—based heavily on reporting from industry—has some very fresh findings.

For one thing, this is not a shortage of specific groups here and there. What we have is a general shortage—a pressing need for all kinds of people who have the ability to think.

For another, this is not a temporary problem. It has come with the sweeping changes in our economy and technology which have produced machines to do the manual, repetitive jobs—but which put a growing premium on the things machines can not do. These are imagining, visualizing, inventing, planning, organizing, designing—thinking.

Finally, this special report pretty well lays the ghost of the man in the gray flannel suit—the concept that has grown up in the last few years of soulless organizations and mighty corporations molding men of high degree and low into faceless, conforming robots.

For the report shows—on evidence gathered from a wide variety of companies—that many people in industry are acutely aware of the need to develop people not to conform but to create. It brings forth the picture of a society that has come full circle in industrial development so that it is now allowing—and leading—people everywhere to develop themselves to the limits of their brains, not their muscles.

As one corporation executive put it: "All phases of business call for creative men; creativity and initiative are not something to be bottled up among a little group of elite intellectuals."

Dead End Street

All those who favor a searching investigation of our monetary system are bound to be disappointed by the inquiry that the Senate Finance Committee has decided to make (BW—Apr.20'57,p47).

The backers of the Finance Committee's inquiry have been startlingly frank about their lack of objectivity. Although it will be headed by Sen. Harry F. Byrd (D-Va.), its real driving force is Sen. Robert S. Kerr (D-Okla.), who has bluntly stated that the investigation will attack "the evil triumvirate of high interest, hard money, and tight credit." This is one issue, he adds, that unites the Democrats.

Starting off from a strictly partisan position will certainly make headlines and may even produce some legislation. But with indictment and verdict decided in advance, this inquiry cannot do the essential job of examining the basic workings of our financial system and shedding light on the proper role of monetary management.

Any study dealing with our monetary system is worse than useless when it has an ax to grind. It would be just as foolhardy, for example, to have a group of Wall Street bankers make the study as it is to let Kerr take over.

This does not mean that Congress must keep its hands off a monetary investigation. The way to get the best results would have been to assemble a committee of experts from private life to do the job—which was Pres. Eisenhower's original suggestion. But when the Democratic majority turned this idea down, Eisenhower proposed a commission representing Congress, the White House, and both major parties. This compromise group could have made an objective study, but it, too, was beaten. In its place, we will have an inquiry, frankly partisan in nature, that is not even attempting to do the kind of job that is needed.

The Senate Finance Committee has, of course, a perfect right to carry out its own inquiry. But the public should not be misled into thinking that it will be the authoritative investigation that the nation has been waiting for. We will still need a full-fledged monetary investigation conducted as objectively and as comprehensively as possible. In fact, we will need it more than ever.

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